# University News

OCTOBER 1, 1986 Re. 1.00

- Expanding Third World Educational Opportunities
- Higher Education : Programme of Action
- Staff Structure for University Libraries
- World Literacy Day Celebrations
- Foreign Students in USSR
- IIEP Training & Research Programmes

# CLASSIFIED ADVERTISEMENTS

## MEERUT UNIVERSITY

### MEERUT

Applications are invited for one Post of Lecturer in each subject (i) **Russian Language (Leave Vacancy)** likely to continue; (ii) **Physics (leave Vacancy,** likely to continue) preferential specialization in Atomic and Molecular Physics/Electronics in the grade of Rs. 700-40-1100-50-1600.

The Application on prescribed form *should reach the Registrar, Meerut* University, Meerut-250005 latest by **24-10-86.**

**Minimum Qualifications**

1. (i) A doctor's degree or research work of an equally high standard in the relevant subject; and

   (ii) Consistently good academic record with First or High Second Class Master's degree or an equivalent degree of a foreign university in the relevant subject.

2. Where the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard it may relax any of the qualifications prescribed in 1 (ii) above.

Note—Other things being equal, preference *will be given to the scheduled caste/* tribe candidates who are considered fit. Such candidates should attach certificate to t at effect from the *District Magistrate.*

Prescribed application form can be obtained by s nding a request to the Dy. Registrar (Accounts) M erut University, Meerut-250005 alongwith a self-addressed envelope of size 23 X 10 cms and stamped *worth Rs. 1.30 accompanied* by Bank Draft of Rs 15/- in favour of the Finance Officer, Meerut University, Meerut or by cash payment of Rs. 15/- at the Cash Counter of the University.

I.P.Os or M.Os are not acceptable. While requesting for application form please mention "Application for Teaching Post" on the envelope.

The candidates who have already applied for the post of lecturer *in* Russian language in reference to our previous advertisement No. Acad/Appt. 3/166 Dt. 18th July, 1986 need not to apply.

**Chander Bhan**
**REGISTRAR**

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## *RANI DURGAVATI* VISHWAVIDYALAYA

### JABALPUR

**No. Estt/86/2790** **Dated : 16-9-1986**

### ADVERTISEMENT

Applications in the prescribed form (in 8 copies are invited for the following posts so as to reach the undersigned *on* or before **October, 22, 1986.**

1. **Professor:** One in English in the *Scale of Pay* of Rs. 1500-60-1800-100-2000-125/2-2500.

2. **Reader:** One in the Department of Journalism and Mass Communication in the scale of pay of Rs. 1200-50-1300-60-1900.

3. **Lecturers:** One each for (i) Political Science (ii) English (iii) Journalism (Audio-Visual Communication) and (iv) Three for Law in the scale of pay of Rs. 700-40-1100-50-1600. (out of these posts, one post each in the Departments of English and Law is temporary for the present.

*The minimum essential qualifications* for these posts are exactly the same as are prescribed by the University *Grants* Commission.

The prescribed application forms (in 8 copies) together with details of qualifications, specialization etc., can be obtained from the undersigned on payment of Rs. 5/- in person or by sending a crossed postal order of Rs. 5/- payable to the Registrar, Rani Durgavati Vishwavidyalaya, Jabalpur. The candidates who desire to get the application forms by Registered post (not by ordinary post) should send an additional amount of Rs. 5/- by postal order for postal expenses.

The University reserves the right to fill in or not to fill in any post and also to call any candidate for inverview.

**R. N. Tripathi**
**REGISTRAR**

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Editor :
SUTINDER SINGH


# Expanding Third World Educational Opportunities


**M. Peter McPherson***


Both research and common sense have clearly established that a country makes a wise investment decision when it puts substantial resources into education. Education is basic to the processess of expanding personal opportunities, human rights and democratic systems. One of the first things the settlers did in this country was to establish a community school and make certain that all children had the chance to learn to read and write. Children in our country, including rural children, were generally provided with the basic educational tools they needed to participate in the development of our country. I believe we can do the same in developing countries to a much greater degree than is presently being done and to a greater degree than many people believe possible. Not all countries will move at the same pace. Not all countries will be willing to make the difficult policy decisions and administrative reforms necessary to provide education to all children. Nor will donors be able to make the decisions for them or substantially finance their expansion and reform efforts.

However, the Agency for International Development (A.I.D.) must encourage and support those willing to try. We have relevant experience and expertise to share, both from our own experience at home and from three decades of international experience. Zimbabwe illustrates what is possible. Six years ago, after 15 years of civil war, the new nation of Zimbabwe committed itself to a massive expansion of education and training opportunities. Most observers, looking at the expensive, centrally managed education system the country had inherited, and the difficult financial circumstances facing the young country, concluded these goals were extremely optimistic, if not outright impossible. But Zimbabwe decided to move aggressively. They relied on community initative self-help, school fees, innovative use of instruction and management technologies, and a fundamental restructuring of administrative and technical support system for local schools. They have made enormous progress.

In only five years primary enrolment increased from about 9,00,000 to over two million. Secondary enrolment jumped from about 60,000 to over 4,00,000. Technical training, agriculture education and the national university also expanded. A.I.D. was pleased to contribute to these reform efforts.

***Progress with Political Will***

Zimbabwe is in many ways unique and its approaches and technical solutions are its own, but it illustrates that remarkable progress is possible where there is the political will to undertake basic changes. Recent economic evidence confirms the importance of education. But all along most countries have believed in education and have been willing to put significant resources into it. The developing countries have been no

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[*Address at the Annual Meeting of the Washington Chapter of the Society for International Development*]

*Administrator, *U.S. Agency for International Development.*

exception. The last 20 years have seen an unprecedented rate of growth of educational opportunities in the developing world. For example, enrolment in school in the developing countries increased by nearly threefold from 1960 to 1980.

In 1960, less than one-third of the children in low-income countries had any opportunity to attend school. Today, three-quarters receive some schooling. and almost 40 per cent of children in low-income countries now complete four grades. More children than ever before are going to school, and. also, more are staying long enough to learn how to read and write.

These are tremendous gains. No one should underestimate their truly monumental proportions or the sacrifices that have brought them about. However, they must be viewed against present-day realities: school-age populations continue to grow, and national budgets for education are severely constrained. The reality is that many countries with rapidly expanding school-age populations will have to substantially increase their efforts just to stay even.

The problem of maintaining these gains has to be viewed in the context of today's financial conditions. The proportion of gross national product devoted to education in developing countries has risen on the average from approximately two per cent in 1960 to four-and-a-half per cent in 1984. The proportion of national government budgets spent on education rose from about 11 per cent in 1960 to 16 per cent in 1984.

Moreover, in recent years, in many developing countries, the pressing needs of other sectors and declining per-capita revenues have begun to limit the ability of governments to sustain this level of support. Education is facing severe financial constraints. Unless countries can use their resources much more efficiently, they will not be able even to maintain the gains achieved with tremendous effort over the past 20 years, let alone meet the remaining needs for more access for girls, the very poor and others.

**Local Control**

It is this context of expanding demand for education and the very real financial squeeze that I want to discuss. There are three ideas I want to put forward, all of them designed to increase a country's ability to provide improved education to the greatest number of children:

—First, I think much more can be done by local communities to take charge of their children's education by decentralizing national education system;

—Second, countries must become more efficient and make better use of existing resources;

—Third, appropriate use of modern technologies can help countries expand and improve their education systems.

As I mentioned earlier, America put a high premium on education as a building block for our own development. But from the beginning, the primary responsibility for providing and maintaining the school, hiring the teacher and getting the textbooks was a local community or parent responsibility. In my home state of Michigan, the first constitution in the 1800s called for the management of primary schools by locally elected officials. Teachers were also hired locally, but early on they had to prove their competence by getting state certification. This blend of local control, community involvement, and state certification still characterizes public education throughout most of the United States. By contrast, most developing countries have inherited or developed education systems that put the major burden on national budgets.

Looking at our own educational development but, even more importantly, reflecting on the experience A.I.D. has gained over these past three decades, I believe the time is right for involving local communities to a greater extent in the management and financing of local education systems. For example, at the local level countries could try to:

—Raise education monies with local property taxes or other taxes;

—Encourage the use of school fees and other direct contributions;

—Levy payroll taxes on employers to finance vocational training. This is currently being done in several Latin American countries;

—Initiate special lotteries for educational expenditures, as a number of countries have done;

—Central governments might provide matching grants to serve as an incentive to generate funds locally for school building and similar purposes.

Speaking generally, I believe we should encourage countries to look for opportunities to increase local

tax authority. In this way revenues can be retained in local communities, under the control of local officials and for the support of local education programs.

I know there are complex issues of public policy and financial administration involved in these suggestions. Much needs to be studied. In fact, the World Bank has just agreed in coordination with us to take a more in-depth look at decentralization.

I also realize that much of our recent experience in the United States shows a shift toward a more centralized education system with fewer school districts and fewer elected school board members and a greater share of state financing. I am not arguing with "consolidation" of one-room schools, et cetera. But I am asking that we draw from our earlier history and experience, which in some key ways is more comparable to the situation facing the developing world today.

At the same time, I suspect that because of current pressure on national education budgets senior government officials will be more receptive to changes—changes that recognize that central government management and control of resources are not the only, or necessarily the best, approach.

**Central Government Role**

The generation of revenues from the local areas is, of course, only one aspect of decentralization. The balance between national standards and local authority is a question that has to be addressed. In most countries, the central authorities will continue to provide a substantial share of the finance. Indeed, some activities probably should remain at the central level; for example:

—Establishing standards for teacher recruitment and training;

—Determining the core curriculum;

—Selecting and procuring texbooks and teachers' guides.

But other activities appear more appropriate at the local level; for example :

—Classroom construction and maintenance;

—Supplementing the core curriculum and national textbooks with locally generated materials;

—Recruitment and employment of teachers.

How to balance responsibilities and the most effective location of control will differ in each country in each region of the world. Basically, I am convinced that the average parent living in Third World countries perceives the value of education and will make the sacrifices necessary for his or her children to obtain it. We must have greater trust in the ability of poor people to make the right choices and in their willingness to fight for a better life for themselves and their children.

**Management Problems**

Secondly, I want do discuss the idea of efficiency. As I said at the beginning, the quantitative expansion of education in developing countries has been enormous.

However, in many countries the large-scale systems, due to increased enrolments, present great management problems. Despite good intentions, too many countries waste money on education which is inefficient and


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ineffective. This results in more academic failures, dropouts and repeaters. Many countries cannot seem to keep up with the expanding enrolments and still maintain satisfactory quality. The education they offer their children is deteriorating to totally unacceptable standards.

It is important that we, the donor community, in our efforts to help countries expand their education systems given priority to child retention and promotion and other efficiency measures. Expansion that results in the simple extension of inadequate systems is not, in fact, likely to result in more children really being able to read and write.

As always, where resources are limited, educational planners need more reliable and accurate information upon which to base sound decisions. For example, A.I.D. has worked recently in Somalia, Botswana, Indonesia. Haiti and Yemen under a 10-year project to improve the efficiency of education systems. Major assessments of each country's educational system and fiscal capacity to support it have been conducted. These countries have made difficult policy decisions based on the information collected in the assessments.

It is this type of long-term support for analysis and planning that the donor community should support, because, it will enable countries to make better decisions and more efficient use of their resources. In many countries in Africa, for example, 100 primary students can be educated for the cost of one university student. Knowing this data is the first step toward making rational allocations.

Clearly the absence of strategies to cope with the management and administration of the educational system is holding back progress.

The donor community should support:

—Improvement in educational planning, administration and management of resources;

—This should lead to significant increases in the number of students completing the systems;

—It might mean substantial improvement in access for girls, the rural poor, and children or ruban slums.

**Use of Technology**

My final point concerns the use of technology. Technology, appropriately used, has provided dramatic breakthroughs in all areas of development, including education.

Let me give you an xample. For the past our years, A.I.D.'s radio education project in the Dominican Republic has been reaching children with an hour or basic education each day. Fifty communities in the poor southwest region of the country have committed their resources to building shelters for the program had have selected a community member to serve as a helper. The helper maintains order in the shelter and helps the children keep pace with the radio instructions.

Studies show that such radio coverage of virtually all geographic areas where there are no schools could be accomplished in a few years at a per-pupil cost of half that of regular schools.

This is the Dominican Republic's short-term solution to the problem of how to educate children who must work alongside their parents and who live in regions without schools or teachers.

The use of technologies in the classroom, or wherever the student is, offers the potential for rapid and significant improvement in the quality and availability of education. We have no choice if we are to serve the huge number of children needing education. We must exploit whatever help technology offers.

I have seen in the remote sections of Nepal what technology can do to overcome the natrual barriers of time and distance. As in many countries, the rural schools of Nepal are served by teachers who have little training for the job. An A.I.D. project, using radio instruction, is helping to upgrade their skills while they remain on the job. Instead of leaving their jobs and moving to a university campus, never to return to teaching in a rural community, the teachers remain in place, and the radio brings the instruction to them. Clearly, the technology is enabling them to become better teachers without leaving their villages. Other technologies promise to help countries improve the management of education resources. A.I.D. is supporting, for example, the development of computer simulation models and management software for making education projections and analyzing problems.

While it may appear that these three topics of decentralization, efficiency and technology are distinct, they can work together. An effective division of responsibility and authority will mean more accountability at each level of the system. Through accountability, children are better served. For example, teachers supervised and paid by local authorities are much more likely to show up in the classroom on a daily basis than those responsible to a faceless

(*Continued on Page 8*)

# Staff Structure for University Libraries : A Proposal

S. C. Uppal*

It is the right time that the University Grants Commission (UGC) formulates, for effective implementation, a staff structure (hierarchy) for a university library including the salary scale, qualifications for recruitment as well as for promotion as at present there is no set pattern especially in respect of the supporting (skilled and semi-skilled) library staff. This is one of the most important aspects of a national policy on university libraries and a complete and permanent solution to the nation's library problems as the efficient service and optimum use of the money spent on the library depends upon the well organised staff structure.

The following staff structure is proposed :

**I. Officers**

1. Librarian
2. Deputy Librarian
3. Assistant Librarian
   Or
   Documentation Officer (Post-graduate College Librarian)

These cadres of Library staff stand adopted by the UGC and are existing in almost all the Universities.

**II. Skilled/Semi-skilled & Operational Staff**

4. Sub-Librarian/Professional Asstt./1st Professional Asstt./Junior Librarian (Undergraduate College Librarian)

5 Library Assistant Grade-I
   Or
   Junior Library Assistant
   Or
   Junior Professional Assistant

6. Library Assistant Grade-II
   Or
   Semi-Professional Assistant

7. Library Assistant Grade-III

**III. General Helpers & Maintenance Staff**

8. Library Cleaners (in the peon scale for cleaning & dusting the shelves & furniture etc.; Middle Pass)

9. Gate Keepers (Ex-serviceman in Peon's scale + Rs. 50.00 special Pay. Minimum : Middle Pass)

**IV. Ministerial & Other Staff**

10. Superintendent
11. Assistant
12. Accountant
13. Clerk-cum-Typist
14. Stenographers
15. Binder (Pay scale as per Sr. No. 6)
16. Bindery Attendant (Peon's scale)
17. Technical Assistant (Reprography/Electronics in the pay scale as per Sr. No. 5 or 10)
18. Machine Operator (Xerox—Pay scale as per Sr. No. 6)
19. Care-Taker-cum-Store Keeper (Pay scale as per Sr. No. 6 or 11)
20. Gestetner Operator (Pay scale as per Sr. No. 7 or 12)
21. Electrician
22. Peon
23. Chowkidar
24. Chowkidar-cum-Sweeper
25. Sweeper
26. Mali

Once one staff pattern as given above, is adopted and notified by the UGC, it will provide not only a uniform structure throughout the country but will also help in getting the different types of posts created and filled up in the Library without causing much administrative hurdles. Hence there will be one standard throughout the country.

The pay scale and rules for recruitment and promotion etc. in respect of the staff under category IV i.e. Sr. Nos. 10 to 26 will be the same as will be prescribed by the university for similar cadres in other offices of the university.

*Deputy Librarian, Dr. Y. S. Parmar University of Horticulture and Forestry, Solan (H.P.)*

The categories I to III (i.e. Sr. Nos. 1 to 9) specifically comes under Library staff and the UGC should lay down the designations, qualifications, pay scales and promotion rules for these categories so that one staff pattern in all the Universities of the country exists and various types of designations presently in vogue are discontinued.

**Qualifications and Mode of Recruitment:**

The following qualifications and mode of recruitment for the Library staff is proposed.

I. **Officers**

1. **University Librarian**
(Scale : At par with University Professor)

**Qualifications**

(a) First or Second Class M.A./M.Sc./M.Com. plus a First or Second Class B.Lib.Sc.; or First or Second Class M.Lib.Sc. or equivalent degree.

(b) At least 5 years experience as Deputy Librarian or equivalent or 10 years experience in Professional capacity as Assistant Librarian or equivalent or above in an University Library or a Library of a repute.

(c) Research/Teaching/Administrative experience and good knowledge of modern library systems, or Ph.D.

2. **Deputy Librarian**
(Scale : At par with Reader)

**Qualifications**

(a) First or Second Class M.A./M.Sc./M.Com. plus a first or Second Class B.Lib.Sc., or First or Second Class M.Lib.Sc. or equivalent degree.

(b) At least 7 years experience as Assistant Librarian or in a responsible professional capacity in a Library of repute.

(c) Research/Teaching/Administrative experience and good knowledge of modern library systems; or Ph.D.

**Recruitment Ratio** : 50% Promotion, 50% Direct. Qualifications for both promotion and direct recruitment are same.

Provision for selection Grade/Personal Pramotion may also be made.

3. **Assistant Librarian**
(Scale : At par with Assistant Professor).

**Qualifications**

(a) First or Second Class B.A./B.Sc./B.Com. Degree plus a First or Second Class M.Lib.Sc. Degree; or First or Second Class M.A./M.Sc./M.Com. Degree and First or Second Class B.Lib.Sc.

(b) At least 3 years experience as Junior Librarian/First Professional Assistant/District Librarian/College Librarian or equivalent Professional experience.

**Recruitment Ratio:** 67% promotion; 33% Direct recruitment.

**Qualifications for Promotion**

(a) B.A./B.Sc./B.Com. degree plus M.Lib.Sc.
Or
M.A./M.Sc./M.Com. degree plus B.Lib.Sc.
Or
B.A./B.Sc. B.Com. plus B.Lib.Sc. and 7 years professional experience in a responsible capacity after obtaining B.Lib.Sc. degree.

(b) Experience not less than 5 years.

**Selection Grade** : Provision of selection grade or personal promotion to UGC scale of Rs. 1200-1900 to this category may also be made as the next higher opening to this category will be limited in view of the lesser number of higher posts available.

II. **Skilled/Semi-skilled & Operational Staff**

4. **Junior Librarian**

(Scal: At par with college lecturer in U.G. College)

**Qualifications**

(a) First or Second Class B.A./B.Sc./B.Com. degree plus a first or Second class M.Lib.Sc. degree; or a First or Second class M.A./M.Sc./M.Com. degree and a First or Second class B.Lib.Sc. degree.

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**Qualifications for Promotion**

(a) B.A./B.Sc./B.Com. degree plus M.Lib.Sc.
Or
M.A./M.Sc./M.Com degree plus B.Lib.Sc.
Or
B.A./B.Sc./B.Com. plus B.Lib.Sc. and 7 years professional experience after obtaining B.Lib.Sc. degree.

(b) Three years professional experience.

**Selection Grade:** Same provision applicable to Assistant Librarian.

5. **Library Assistant Grade-I**

(Pay-scale as may be proposed by UGC, but not below Superintendent Grade I or Head Master plus Rs. 50 special pay for technical typing job).

**Recruitment Ratio** : 67% promotion, 33% Direct.

**Qualifications for Direct Recruitment and also for promotion**

(a) B.A./B.Sc. B.Com. degree plus B.Lib.Sc. degree. (Type test shall have to be qualified within a year).
Or
Graduate with certificate in Library Science and with typing speed of 25 W.P.M- (English) or 20 W.P.M. (Hindi) and 5 years working experience as Library Assistant Grade-II or equivalent.
Or
Matric with Certificate in Library Science and with typing speed of 25 W.P.M. (English) or 20 W.P.M. (Hindi) and 7 years working experience as Library Assistant Grade-II or equivalent.

(b) Preference to those having very good handwriting.

**Selection Grade**

Provision of selection grade is also proposed to this category for those who have either worked for ten years in this category or have ten years or less service left for retirement and having no adverse entry in the service record. Selection grade is proposed because :

(a) Promotion from this category will be admissible to only those who possess minimum qualification as B.Lib.Sc. degree.

(b) Number of the incumbents likely to be affected by imposition of qualification bar will be large and hence some other alternative incentive is required for keeping charm and efficiency in the profession.

6. **Library Assistant Grade-II**

(Pay-scale as may be proposed by UGC, but not below Sr. Assistant or Graduate Teachers plus Rs. 50 special pay for technical typing work suoh as catalogue cards etc.)

**Recruitment Ratio:** 75% promotion, 25% Direct.

**Qualifications for Direct Recruitment and also for promotion**

(a) Matric with certificate in Library Science and with typing speed of 25 W.P.M. (English) or 20 W.P.M. (Hindi) and 3 years working experience as Library Assistant Grade-III or equivalent.

(b) Possessing very good handwriting.

**Selection Grade:** As may be proposed by UGC.

7. **Library Assistant Grade-III**

(Pay-scale as may be proposed by UGC, but not below Sr. Clerk or JBT Teachers plus Rs. 50 special pay for technical typing job).

**Recruitment Ratio** : 100% Direct recruitment.

**Qualifications**

(a) Matric with Certificare in Library Science.
(b) Possessing very good handwriting.
(c) Selected candidate has to clear type test within a period of 2 years.

**Selection Grade:** As may be proposed by UGC.

III. **General Helpers & Maintenance Staff**

8. **Library Cleaner**
(At par with Peon's scale)

**Recruitment Ratio:** 100% Direct recruitment.

**Qualifications**

(a) Middle pass/under-Matriculates.

**Selection Grade:** As applicable to the post of Peon.

9. **Gate Keeper/Janitor**

(At par with Peon's scale plus Rs 50 special pay).

**Recruitment Ratio:** 100% Direct recruitment.

**Qualifications**

(a) "Middle pass and should be an ex-serviceman."

**Selection Grade:** As applicable to the post of Peon.

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(b) At least 5 years experience as Deputy Librarian or equivalent or 10 years experience in Professional capacity as Assistant Librarian or equivalent or above in an University Library or a Library of a repute.

(c) Research/Teaching/Administrative experience and good knowledge of modern library systems, or Ph.D.

2. **Deputy Librarian**
(Scale : At par with Reader)

**Qualifications**

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(b) At least 7 years experience as Assistant Librarian or in a responsible professional capacity in a Library of repute.

(c) Research/Teaching/Administrative experience and good knowledge of modern library systems; or Ph.D.

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3. **Assistant Librarian**
(Scale : At par with Assistant Professor).

**Qualifications**

(a) First or Second Class B.A./B.Sc./B.Com. Degree plus a First or Second Class M. Lib.Sc. Degree; or First or Second Class M.A./M.Sc./M.Com. Degree and First or Second Class B.Lib.Sc.

(b) At least 3 years experience as Junior Librarian/First Professional Assistant/ District Librarian/College Librarian or equivalent Professional experience.

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(b) Experience not less than 5 years.

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4. **Junior Librarian**

(Scal: At par with college lecturer in U.G. College)

**Qualifications**

(a) First or Second Class B.A./B.Sc./B.Com. degree plus a first or Second class M.Lib. Sc. degree; or a First or Second class M.A./M.Sc./M.Com. degree and a First or Second class B.Lib.Sc. degree.

**Recruitment Ratio** : 50% promotion, 50% direct recruitment.

**Qualifications for Promotion**

(a) B.A./B.Sc./B.Com. degree plus M.Lib.Sc.
Or
M.A./M.Sc./M.Com degree plus B.Lib.Sc.
Or
B.A./B.Sc./B.Com. plus B.Lib.Sc. and 7 years professional experience after obtaining B.Lib.Sc. degree.

(b) Three years professional experience.

**Selection Grade:** Same provision applicable to Assistant Librarian.

5. **Library Assistant Grade-I**

(Pay-scale as may be proposed by UGC, but not below Superintendent Grade I or Head Master plus Rs. 50 special pay for technical typing job).

**Recruitment Ratio** : 67% promotion, 33% Direct.

**Qualifications for Direct Recruitment and also for promotion**

(a) B.A./B.Sc./B.Com. degree plus B.Lib.Sc. degree. (Type test shall have to be qualified within a year).
Or
Graduate with certificate in Library Science and with typing speed of 25 W.P.M- (English) or 20 W.P.M. (Hindi) and 5 years working experience as Library Assistant Grade-II or equivalent.
Or
Matric with Certificate in Library Science and with typing speed of 25 W.P.M. (English) or 20 W.P.M. (Hindi) and 7 years working experience as Library Assistant Grade-II or equivalent.

(b) Preference to those having very good handwriting.

**Selection Grade**

Provision of selection grade is also proposed to this category for those who have either worked for ten years in this category or have ten years or less service left for retirement and having no adverse entry in the service record. Selection grade is proposed because :

(a) Promotion from this category will be admissible to only those who possess minimum qualification as B.Lib.Sc. degree.

(b) Number of the incumbents likely to be affected by imposition of qualification bar will be large and hence some other alternative incentive is required for keeping charm and efficiency in the profession.

6. **Library Assistant Grade-II**

(Pay-scale as may be proposed by UGC, but not below Sr. Assistant or Graduate Teachers plus Rs. 50 special pay for technical typing work such as catalogue cards etc.)

**Recruitment Ratio:** 75% promotion, 25% Direct.

**Qualifications for Direct Recruitment and also for promotion**

(a) Matric with certificate in Library Science and with typing speed of 25 W.P.M. (English) or 20 W.P.M. (Hindi) and 3 years working experience as Library Assistant Grade-III or equivalent.

(b) Possessing very good handwriting.

**Selection Grade:** As may be proposed by UGC.

7. **Library Assistant Grade-III**

(Pay-scale as may be proposed by UGC, but not below Sr. Clerk or JBT Teachers plus Rs. 50 special pay for technical typing job).

**Recruitment Ratio** : 100% Direct recruitment.

**Qualifications**

(a) Matric with Certificate in Library Science.
(b) Possessing very good handwriting.
(c) Selected candidate has to clear type test within a period of 2 years.

**Selection Grade:** As may be proposed by UGC.

III. **General Helpers & Maintenance Staff**

8. **Library Cleaner**
(At par with Peon's scale)

**Recruitment Ratio:** 100% Direct recruitment.

**Qualifications**

(a) Middle pass/under-Matriculates.

**Selection Grade:** As applicable to the post of Peon.

9. **Gate Keeper/Janitor**

(At par with Peon's scale plus Rs 50 special pay).

**Recruitment Ratio:** 100% Direct recruitment.

**Qualifications**

(a) "Middle pass and should be an ex-serviceman."

**Selection Grade:** As applicable to the post of Peon.

Selection grade provision has been proposed in each category because of the limited promotional avenues available in the Libraries.

The qualification bar may not, however, be applied while granting the revised pay-scale to the existing employees if they possess the already prescribed qualifications pertaining to their relevant present post to which they were appointed/promoted and have crossed the age of 50 years and have no adverse entry in their service record.

Once these norms are adopted and approved by the UGC; existing anomalies in the pay scales of the existing staff can be removed in accordance with these norms rather than deciding individual cases. Further, anomalies will also not crop up in future as there will be proper guidelines/norms according to which posts of particular designations and scale will be created by the universities all over India.

**Provision for Study Leave**

Promotion avenues to the library staff are open subject to the fulfilment of prescribed qualifications. It has, therefore, been made compulsory for every person working in the library profession to enchance his/her qualifications if he/her is to become eligible for next higher post either through promotion or recruitment. It is, therefore, proposed that:

(i) Universities should grant permission liberally to the library staff for enchancing academic qualifications either through correspondence courses or in the capacity of a private student.

(ii) Universities should grant 'Study Leave' for prosecuting a course of study for obtaining professional qualification of either "Bachelor Degree in Library Science" or "Master Degree in Library Science" or "Ph.D." in accordance with the "Civil Service Leave Rule No. 50" as the grant of study leave shall be of definite advantage from the point of view of professional proficiency, technical standards and competence in discharging the duties and thus substantially benefiting the library services. The period of bond to be executed by the incumbent should be double the period of the study leave granted. □

# Expanding Third World Educational Opportunities

(*Contd. from Page 4*)

bureaucracy in a distant capital. Also, technology can markedly improve the quality of instruction, reduce dropouts and save large amounts of money that would otherwise be wasted. An educational system that is managed by the people who benefit from it and profit from effective instruction made possible by modern technology is likely to achieve a higher level of efficiency.

I know that many countries have already initiated efforts in all three of the areas I have discussed: decentralization, efficiency and technology—for example, the large-scale Harambee movement in Kenya, where local communities provide their own schools. This has been attempted on a smaller scale in many countries throughout the world.

We must admire what the Andean provinces of Cuzco, Puno and Apurimac in Peru have done to provide classroom space and support for teachers in their preschool project. Zimbabwe, Paraguay, Brazil, Jordan and Korea are countries that have undertaken some type of administrative decentralization in an effort to tie the costs and control of education more directly to those who benefit from it.

**A.I.D. Support**

My purpose is to underline A.I.D.'s strong interest in education. A.I.D. will have to find ways to encourage and assist countries in this effort within the limited resources available to us.

We are putting about 50 million dollars into education this fiscal year, not including our general training programs. A.I.D. is not in a position to announce an expensive new effort, but we can carefully direct what resources we have. Also, as one of the most experienced donors, we have a role in articulating the lessons we have learned to developing countries and other donors.

I believe that Third World countries can provide much higher quality educational services to many more citizens:

—By helping countries experiment with a balance of central and local responsibility;

—By making more efficient use of resources available;

—By proper use of technology.

This is a great challenge, but more importantly, it is a great opportunity. The opportunity is written on the face of the child who can escape from the prisons of ignorance and lift his country with his talent and energy. □

# HIGHER EDUCATION

## Programme of Action

**Our issue of 1 July 1986 had reproduced the New Education Policy 1986 as approved by the Parliament. While presenting the policy to the Parliament, the Minister of Human Resource Development, Shri P. V. Narasimha Rao, promised to bring before it an Action Plan for the implementation of the policy in its monsoon session. In pursuance of this objective, as many as 23 task forces were constituted and assigned a specific subject covered by the policy. The task forces examined the present situation and elucidated the implications of the specific statements contained in the policy. They have projected the actions necessary as also indicated the targets and the phasing of the programmes. Based on the labours of these task forces, and in keeping with his promise, the Minister of Human Resource Development presented to the Parliament a Programme of Action. We have pleasure in reproducing the chapter pertaining to Higher Education in the document 'Programme of Action' for the benefit of our readers.**

### The Present Situation

1. We have a large system of higher education. But the developments in this field have been extremely uneven. The facilities provided in Universities and Colleges vary widely. Research in the Universities is cost effective, but large inputs have gone to laboratories outside the Universities. The courses offered by the universities have not been reorganised to meet the demands of the times. Their relevance and utility are constantly questioned. The credibility of the evaluation system is being eroded.

2. The University system should be enabled to move centre-stage. It should have the freedom and responsibility to innovate in teaching and research. The emphasis on autonomy of colleges and departments, provision of means to interact across boundaries of institutions and funding agencies, better infrastruture, more rationalised funding for research, integration of teaching, research and evaluation, all these reflect this major concern.

### The Policy, Programmes and Strategies for Implementation

3. The National Policy on Education visualises that higher education should become dynamic as never before. The main features of the programmes and strategies to impart the necessary dynamism to the higher education system will consist of the following:

(i) Consolidation and Expansion of Institutions
(ii) Development of Autonomous Colleges and Departments
(iii) Redesigning Courses
(iv) Training of Teachers
(v) Strengthening Research
(vi) Improvements in Efficiency
(vii) Creation of structures for co-ordination at the State and National levels.
(viii) Mobility

### Consolidation and Expansion (para 5.26)

4. Many of the 150 Universities and 5,000 Colleges have not been provided with a minimum level of infrastructure for the maintenance of quality and standards. Provision of these facilities is essential to protect the system from deterioration.

5. It will not be possible to eliminate all the accumulated deficiencies immediately. A beginning is proposed to be made to improve the facilities in these institutions in the Seventh Plan which will continue in the Eighth and subsequent Plans. To achieve these objectives, it is proposed:

(a) to provide appropriate funding to Universities and Colleges according to the norms to be evolved by the University Grants Commission for each specified course and intake;

(b) to prepare a plan to equip the existing institutions in phased manner on the basis of the norms prescribed;

(c) to establish institutions within university system which will have close ties with National Laboratories and other agencies; a Task Force will be appointed by the UGC to evolve guidelines for setting up such institutions and their management structure;

(d) to formulate a scheme by the UGC to provide financial assistance and other incentives, including model statutes for promotion and development of autonomous departments within the universities;

(e) to review the management patterns including the structure, roles and responsibilities of various universities/ bodies in the light of the

new demands on the University system. The UGC will take steps to promote the evolution of new, efficient and more effective management systems and organise wide discussions on them so that they may become the basis of new legislations;

(f) to take effective steps to ensure that no new institutions are established without careful planning and the provision of the necessary physical facilities;

(g) to formulate guidelines for granting affiliation to new colleges which should provide, among others, the minimum facilities required in each institution including new teaching aids such as audio-visual systems, VCRs, computers, etc; and

(h) to regulate admission on the basis of physical facilities and to develop entrance examinations for admission to institutions of higher education.

6. The State Councils of Higher Education will prepare co-ordinated programmes of development of higher education in each State for consolidation of the existing institutions and their infrastructure, programme of strengthening non-viable colleges including alternate forms of their utilisation (vocationalisation and diversification of courses), special programmes for strengthening colleges located in rural areas, etc. Such State level plans will be consolidated by the UGC and progress of their implementation monitored by it.

**Development of Autonomous Colleges (para 5.28)**

7. The system of affiliated colleges does not provide autonomy to deserving colleges to frame curricula, courses of studies, or their own system of evaluation. Although the UGC has been supporting this programme, only 21 colleges have been conferred autonomous status so far.

8. It is envisaged that about 500 colleges should be developed as autonomous colleges in the Seventh Plan, and the existing affiliating system might be replaced in the long run. Due care will be taken to evolve a suitable framework for autonomous Colleges.

9. In order to achieve this objective, it is proposed:

(a) to make provision in the University Acts where necessary, to enable colleges to become autonomous;

(b) to frame guidelines and pattern of assistance including the extent of academic, administrative and financial freedom and the corresponding responsibilities devolving on the autonomous colleges, their management structures, including provisions for safeguarding the interests of teachers, etc;

(c) to formulate a scheme of incentives such as special assistance to selected colleges, creation of posts of Readers and Professors, provision of a higher level of grant for development, etc. to colleges which become autonomous;

(d) to provide special assistance to colleges in tribal/backward areas to enable them to develop into autonomous colleges;

(e) to make statutory provision, if necessary, to enable autonomous colleges to award their own degrees or to confer deemed university status on them to develop other appropriate mechanisms to accelerate the process of curricular reforms, design of courses, reforms in teaching and evaluation procedures, etc.

(f) to develop appropriate instruments for review/appraisal of the scheme of autonomous colleges at regular intervals, and to develop interaction among colleges to promote the scheme of autonomous colleges;

(g) to initiate detailed studies to develop alternate methods of university-college relationship that could replace the existing affiliating system in the long run.

10. The programme of autonomous colleges will be fully funded by the Central Government for a period of five years. Funds for this purpose will be made available to the UGC. However, the maintenance expenditure of these colleges will continue to be met by the resources which provide such expenditure, at present.

**Design of Courses (para 5.29)**

11. Higher Education Programmes have to be redesigned to meet the growing demands of specialisation, to provide flexibility in the combination of courses, to facilitate mobility among courses, programmes and institutions, to update and modernise curricula, to integrate work/practical experience and participation in creative activities with the learning processes, and to facilitate reforms in the evaluation procedure. The present rigid structures do not permit these reforms.

12. In order to achieve this objective, it is proposed:

(a) to secure full involvement of the Universities and

faculties in redesigning and reorienting the courses in higher education;

(b) to review comprehensively the existing guidelines on restructuring courses framed by the UGC to incorporate the new concepts in the design, content and structure envisaged in the policy;

(c) The foundation course proposed in the UGC scheme of restructuring courses will be an important element of the general undergraduate programmes. A special emphasis should be laid on the study of India's Composite Culture so as to foster unity and integrity of the country among students. Women's studies will be one of the components of the Foundation Course. The curricula of different disciplines will also reflect issues concerning Women's status and development;

(d) to reorganise the Boards of Studies in the Universities to facilitate redesigning of courses and to promote interdisciplinary programmes and inter-faces with employment;

(e) to make provision for academic recognition/credit for participation in creative activities like NSS, NCC, Sports, Games. etc.;

(f) to organise regional/national seminars to generate enthusiasm in and commitment to the new design of courses, flexibility in the combinations, modular structure, accumulation of credits etc.; and

(g) to link development grants to universities with the willingness and interest in reorganisation of courses and commitment to innovation as a continuing effort.

13. During the Seventh Plan, the UGC has set up 24 Curriculum Development Centres. This number will be increased and their work will be oriented to the design visualised in the Policy. The International Centre of Science & Technology Education may be utilised to coordinate and develop curricula in the field of Science & Technology. To begin with, in the next three years, model course material in 15 subjects will be developed in the form of audio/video cassettes with the help of best available teachers. The material could also be used for self-instruction and put out as radio/TV broadcasts. Eventually, such material is proposed to be made available as multimedia packages.

14. Autonomous colleges and autonomous Departments will be major instruments in promoting the redesign of courses. The College Development Councils to be set up will encourage local initiative in the design of courses especially the application-oriented component and strengthening of linkages. The State Councils of Higher Education will ensure the implementation of these programmes and monitor the progress of their implementation.

**Teachers' Training**
**(Para 5.31)**

15. The present system does not accord teachers a proper economic and social status, opportunities for professional and Career development, initiative for innovation and creative work, proper orientation in cocept, techniques and value system to fulfil their role and responsibilities. Motivation of teachers is important for implementation of the policy.

16. In order to achieve this, it is proposed :

(a) to organise specially designed orientation programmes in teaching methodologies, pedagogy, educational psychology, etc., for all new entrants at the level of lecturers;

(b) to organise refresher courses for serving teachers to cover every teacher at least once in 5 years;

(c) to organise orientation programmes by using the internal resources of universities and by bringing a number of colleges together;

(d) to encourage teachers to participate in seminars, symposia, etc.

17. The Indira Gandhi National Open University will run special programmes to promote self-learning among teachers. The recommendations of the Committee on revision of pay scales of teachers in universities and colleges will be examined for implementation. Teachers will be recruited on the basis of a common qualifying test, the details of which will be formulated by the UGC. Methodologies will be developed for evaluation of teacher performance through self-appraisal, through peer groups, and also by students. Career advancement of teachers will be linked with professional development and performance appraisal. The Management structures of universities will be remodelled to provide opportunities for greater participation of teachers at all levels in academic administration.

**Research in Universities**
**(paras 5.32 and 5.33)**

18. A large number of research institutions have been set up outside the university system. The process of higher education has to develop in close contact with first class research in frontier areas of science, technology, humanities and social sciences. If higher

education has to become relevant and solve the most difficult problems, universities must come centre-stage. They should grapple with significant scientific problems of industry and national agencies.

19. In order to achieve these objectives, it is proposed :

(a) to strengthen the infrastructure and enhance the funding of research in universities;

(b) to set up cooperative research facilities in the university sector;

(c) to locate most of the research institutes to be set up in the future in the universities with appropriate autonomous management structure;

(d) to encourage industries to set up most of their research activities in the university sector;

(e) to foster formal links with various research agencies to link education with research and to identify tasks that could be undertaken within the university system;

(f) to modify curricula and methodologies of learning through appropriate research and development to incorporate elements of problem solving, creativity and relevance; and

(g) to institute talent search examinations and Scholarship schemes at undergraduate and post-graduate levels; to conduct all-India tests for admission to research programmes and to introduce periodic review of fellowships.

20. Several agencies are funding research projects at present. While the multiplicity of funding may continue for sponsored research or goal-oreinted projects, a National Research Foundation is proposed to be set up to bring about better coordination, overview and quality control. This Foundation will fund all research programmes presently supported by Central Government except those directly related to the missions of the existing agencies. The National Research Foundation will be an independent body set up by pooling together, and subsequently augmenting, the resources now being utilised by various agencies. A Working Group will be set up to formulate details of its structure and functioning.

**Improvement in Efficiency**

21. In order to improve the overall efficiency in the functioning of the universities it is proposed:

(a) to equip every university with a computer for maintenance of students records, accounts and other data required for administration and management.

(b) to establish networking arrangements of selected institutions from all parts of the country by linking them together through a computer data network with terminals for each to enable sharing of information, data banks, library and computation resources, consultancy and consultation and generally promotion of inter-action between researchers and academics.

(c) to ensure access to information and source material essential for research, a network of regional libraries as a common servicing facility will be established. These libraries will be equipped with modern facilities for information storage, retrieval reprography, etc.

**Creation of Machineries for Co-ordinated Development**

**(A) State Councils of Higher Education (para 5.30)**

22. There is at present no effective machinery for planning and coordination of Higher Education at the State level and co-ordination of State level programmes with those of the UGC. In order to fill this gap, it is proposed :

(a) to set up State Councils of Higher Education as Statutory Bodies.

(b) to have for the guidance of State Governments, model provisions framed by the UGC setting out the composition and powers of the State Councils.

(c) The major functions of the Council will include :

(1) preparation of consolidated programmes of higher education in each State;

(2) initial scrutiny of the development programmes of universities and colleges;

(3) assistance and advice to UGC in respect of maintenance of standards;

(4) assistance to State Governments in determining the block maintenance grants.

(5) encouragement of the programmes of autonomous colleges;

(6) monitoring the progress of implementation of programmes and

assessment of performance of institutions;

(7) advising the State Governments in setting up new institutions.

**(B) National Apex Body (Para 5.34)**

23. The Policy envisages the establishment of a national body covering higher education in general, agriculture, medical, technical, legal and other professional fields for greater coordination and consistancy of policy, sharing of facilities, and developing inter-disciplinary research.

24. Presently, the resposibility for development of higher education is shared by a number of agencies. There are separate structures for higher education in agriculture, engineering and medicine. This separation in the decision-making and funding mechanisms has become more of a problem because various disciplines are emerging, and the courses of study have to be developed keeping in view the need for developing compatible inter-faces with other related disciplines.

25. In order to remedy this problem it is proposed to establish an apex body at the national level for higher education and to undertake integrated planning and to reinforce programmes of post-graduate education and inter-disciplinary research.

26. For areas such as agriculture, medicine, engineering, distance learning, etc., separate bodies will be set up. These bodies structured on the lines of the University Grants Commission, along with UGC itself, will oversee all operational aspects of higher education. The details of the legislation and/or other means for the establishment of these bodies will be worked out. The major functions to be performed by the apex body would be :

(a) to advise Government on Policy;

(b) to coordinate activities of the other bodies in different fields;

(c) to encourage inter-disciplinerity and promotion of inter-faces among different areas;

(d) to allocate resources;

(e) establishment and management of common infrastructures and institutions; and

(f) coordination of policy concerning external academic relations.

**(C) Accreditation and Assessment Machinery**

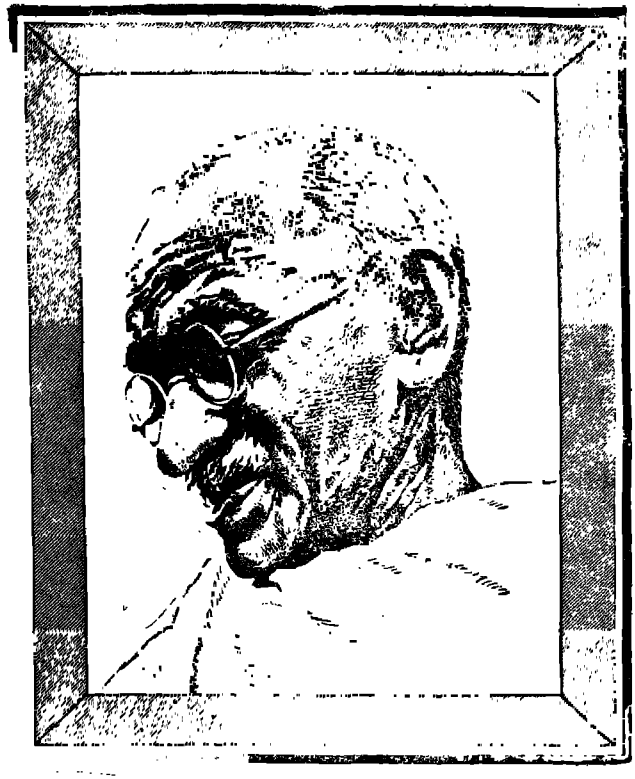
27. Excellence of institutions of higher education is a function of many aspects; self evaluation and self improvement are important among them. If a mechanism is set up which will encourage self-assessment in institutions and also assessment and accreditation by a Council of which these institutions are corporate members, the quality of process, participation, achievements, etc., will be constantly monitored and improved.

28. It is proposed to develop a mechanism for accreditation and assessment for maintaining and raising the quality of institutions of higher education. As a part of its responsibility for the maintenance and promotion of standards of education, the UGC will, to begin with, take the initiative to establish Accreditation and Assessment Council as autonomous body. It will evolve its own criteria and methodology for accreditation assessment. Its main functions will be catalytic; it will not be enforcing any given norms and standards. It will analyse and evaluate institutions and their performance to facilitate self-improvement. This Council will be supported by a professional secretariat in the performance of its functions.

**Mobility**

29. The Policy visualises measures to facilitate inter-regional mobility by providing equal access to every Indian of requisite merit regardless of his origin and emphasises the universal character of a university. To achieve this objective, the state governments and Universities will be encouraged to admit students based on merit without any regard to domicile or nativity. Schemes to provide neccessary support and guidance to institutions to admit students from other States will be evolved. In order that the all-India character in the composition of the student enrolment and faculty strength is ensured, priority will be given to schemes for construction of student hostels, staff quarters, provision of scholarships, etc. Efforts will be made to move towards the objective of making recruitment of teachers on all-India basis in consultation with the State Governments.

30. Extension service and continuing education programmes will be an essential component of programmes and activities of all the universities. Provision will be made to secure greater involvement of teachers and students in the universities in extension services which will be as important a function of the universities as teaching and research. To promote and strengthen this function provision for academic recognition/credit will be considered in the course requirements. □



# BAPU'S RELIGION

*"My religion has no geographical limits.*
*My religion is based on truth and non-violence.*
*My religion forbids me to hate anybody.*
*Religion is not for separating people —*
*It is to bind them."*

That was the Mahatma's religion

**True Religion of Love and Tolerance**

## World Literacy Day Celebrations

To mark the World Literacy Day, the Gujarat State Education Minister, Mr. Hasmukh Patel, flagged off a procession of over 500 people, mostly students, carrying "Saksharata jyots" (literacy lamps) at the Gujarat Vidyapith on 8th September, 1986. The procession, on foot, is scheduled to visit 1200 villages in 24 days and would generate a general awareness among the people of the need to remove illiteracy.

Speaking on the occasion, Mr. Patel complimented the Vidyapith for launching its literacy drive. He urged the youth to take up the responsibility of banishing illiteracy among the elders. Every effort should be made, he said, to literate everyone in Gujarat by the turn of the century.

Prof. Ramlal Parikh, Vice-Chancellor, said that the Union Government had asked every university in the country to take up one district each for imparting mass literacy. The Vidyapith, he said, has therefore adopted Gandhinagar district and is committed to eradicate illiteracy within five years. He is reported to have announced cash prizes for those who would identify a single illiterate person in whole of Gandhinagar district after five years.

The University Grants Commission (UGC) has already identified adult education Centre of the Vidyapith as the resource centre for adult education in the State.

## Diversification of Punjab Economy

Professor S.S. Johl, former Vice-Chancellor of Punjabi University, and at present Professor of Eminence, Punjab Agricultural University, delivered a special lecture on "Diversification of Punjab Economy" at the Punjab School of Economics, Guru Nanak Dev University, Amritsar recently. Prof. S.S. Bal, Vice-Chancellor, Guru Nanak Dev University, presided.

Prof. S.S. Johl stressed the need of reducing, overly dependence of the State's economy on mainly two crops, on account of economic as well as ecological considerations. The dependence on two crops makes the economy of the State as well as of those of the farmers very fragile. He felt that at least 20 per cent of the area presently occupied by wheat and paddy crops should be diverted to other crops and alternative farm enterprises like sugarcane, oilseeds, fruits, vegetables and livestock production etc. In this context he stressed the need for replacing the existing low milk yielding buffaloes and local cows by crossbred and purebred high yielding cows. He added that at least one lakh modern cows would be required to start with so that the scheme may have some visible effect.

With regard to increase in prices for raising the production of oilseeds, Dr. Johl felt that the marginal increase in the prices of oilseeds will not induce the farmers to shift from wheat and rice to these crops. He, therefore, suggested that the whole question needed to be examined thoroughly before formulating policies in this area. He also mentioned that cost of production of oil-seeds in India was much higher than the international prices. However, he added, ensured support price alongwith high yield varieties and improved technology were essential if the farmers were to be encouraged to shift to the production of oilseeds.

## Special Assistance for PU Chemistry Deptt.

Under its Special Assistance Programme, the University Grants Commission (UGC) has selected the Chemistry Department of the Panjab University, Chandigarh, for a special financial assistance of Rs. 50 lakhs to implement the DSA programme in Chemistry for a period of five years. This was based on the recommendations of the UGC assessment committee constituted to evaluate the work done in the department. The department had also been identified by the UGC for financial support under Cost Programme and had received Rs. 53 lakhs for improvement of the infrastructure facilities.

The assessment committee appreciated the work done by the department in producing good teaching material as well as providing enough opportunity to the teachers to update the courses. The committee is also reported to have recommended upgrading of the department to the centre for advanced studies.

## Common Legislation for HP Agril. Universities

The Himachal Pradesh Krishi Vishwavidyalaya, Palampur and the Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni (Solan) would be governed by the common Act. According to Dr. N.S. Randhawa, Director-General, Indian Council of Agricultural Research (ICAR), the draft Act prepared by the State Government has already been approved by the UGC and the ICAR.

## Research Support for Osmania University

The University Grants Commission (UGC) has sanctioned a financial support of Rs. 24.70 lakhs, spread over a period of three years, under the department research support programme, for the Geography Department of the Osmania University to develop the area of Integrated Mineral Exploration. The financial support sanctioned to the Geology Department under the same pro-

gramme is said to be Rs. 24.30 lakhs—Rs. 19.30 lakhs non-recurring and Rs. 5 lakhs recurring — also spread over a period of three years.

### Biotechnology Centre for Delhi

The Asian Section of the International Centre for Genetic Engineering and Biotechnology (ICGEB) is proposed to be set up in Delhi. A 25-acre site at the Jawaharlal Nehru University campus has been selected for the purpose. This decision is understood to have been taken at a meeting held recently between ICGEB Director Prof. I.C. Gunsalus and Dr. S. Ramachandran, Secretary, Department of Biotechnology, Ministry of Science and Technology, Govt. of India.

## News from Agril. Varsities

### Workshop on Land Use in Haryana

The Land Use Board, Haryana, organised, in collaboration with the Haryana Agricultural University, a 2-day Workshop on Land Use in Haryana. Addressing the workshop, the Vice-Chancellor of Haryana Agricultural University, Mr. L.D. Kataria cautioned the scientists that rising water table, salinisation, water erosion and increasing desertification due to deforestation would further degrade our lands if proper care was not taken. He called for diversification of agricultural practices like changes in cropping pattern, introduction of remunerative crops suited to soil and environmental conditions and afforestation of community and degraded lands with suitable tree species.

The Workshop stressed the urgent need of developing community lands which are not being properly managed. It recommended the formation of a committee of state level officers and University scientists to review the available data on land use and to develop short term and long term plans for use of underground brackish water, desert development, controlling the rising water table and reclamation of soil effective soils.

Over hundred delegates from State Department of Agriculture, Irrigation and Drainage, Soil Conservation, Forestry as well as National Research Institutes and Haryana Agricultural University attended the workshop where about 20 research papers on land resources survey and land use, soil conservation and dryland agriculture, management of salt effective soils and irrigation and rain water, were presented.

### PAU Bags UNDP Projects

Two new projects to be funded by the United Nations Development Programme (UNDP) and the Indian Council of Agricultural Research (ICAR) have been sanctioned to the Punjab Agricultural University.

According to Dr. Sukhdev Singh, Vice-Chancellor, the first project under the Advanced Centres of post-graduate agricultural education and research seeks establishment of a centre on soil fertility and plant nutrition. This Centre envisages purchase of sophisticated equipment which would be installed in the laboratories of the Department of Soil. A sum of $ one million is reported to have been allocated for this project.

Another project on "Nutrition and Child Development", for which a sum of $ one lakh has been sanctioned, aims at enhancing the competence of the professional staff and augmenting the facilities for advanced level teaching, particularly in the area of nutrition.

### Agricultural Officers' Workshop at HAU

The Haryana Minister for Agriculture, Mrs. Prasanni Devi, called for urgent steps on warfooting for increasing the production of oilseeds and pulses and also for extending effectively the latest Package of Practices to the farmers in dryland areas. She was inaugurating the 3-day Agricultural Officers' Workshop for Rabi Crops at the Haryana Agricultural University recently. She urged the scientists and field staff to evolve suitable technology for increasing the production in dryland areas. She commended the research work being done in the area of social forestry at the university and hoped that the desired results would bring more prosperity in the state

Mr. L.D. Kataria, Vice-Chancellor, who also addressed the scientists and the field staff on this occasion, stressed the need of close linkages amongst the farmers, field functionaries and the scientists. He also said that the research work being conducted in the University should

### We Congratulate...

1. **Dr. K.P. Mehra who has been appointed as Vice-Chancellor of the Bhopal University, Bhopal.**
2. **Maj. P. K. Das who has been appointed as Vice-Chancellor of the Utkal University, Bhubaneswar.**
3. **Prof. M.V. Pylee, former Vice-Chancellor of Cochin University of Science and Technology, who has been appointed as Professor Emeritus at the Cochin University of Science and Technology.**

be in accordance with the agro-climatic requirements of the state.

Over 350 field officers from the Department of Agriculture, HAU scientists and representatives of agricultural input agencies attended the workshop.

## UGC Recognition for Y.S. Parmar Varsity

The University Grants Commission (UGC) is reported to have agreed, in principle, to grant recognition to Dr. Y.S. Parmar University of Horticulture and Forestry, the first of its kind in Asia. The University would also start getting grants from the Indian Council of Agricultural Research (ICAR) soon after the formal recognition is announced by the UGC. This was indicated by Dr. N.S. Randhawa, Director-General of the ICAR in Shimla recently.

Dr. Randhawa appreciated the research work being carried out at the university for evolving alternative fruit packing cases to replace the traditional wooden cases.

The ICAR, Dr. Randhawa added, was setting up a national mushroom research centre at Solan and had also allocated Rs. 2.5 crores for strengthening research work in the agricultural universities of the State during the Seventh Plan period. Besides, a sum of Rs. 5.62 crores would also be made available to the universities for raising the production of foodgrains and fruits under the World Bank project being executed by the ICAR.

A national research centre for cold water fisheries is also proposed to be set up in U.P. hills. The Council also proposes to carry out research on temperate animals with technical assistance from the USSR.

## Dryland Technology & Income and Employment Potential of Farmers

A study conducted by the Tamil Nadu Agricultural University, Coimbatore, to assess the impact of dryland technology such as pre-monsoon sowing, gorru-sowing, interculture, weeding and fertilizer application in income and employment potential of farmers revealed that the average size of holding of adopters and non-adopters was 8.56 and 7.66 acres respectively. About 50% of the adopters, who possessed a pair of bullocks, gained additional income and employment by way of hiring. About 28% of the adopters and 20% of the non-adopters owned milch animals also.

On an average the adopter's farm provided an additional human labour employment of 14% in fodder cholam, 30% in K. Tall cholam, 38% in varagu, 30% in redgram and 35% in cotton. The additional profit per acre of the adopters was estimated at 93% in fodder cholam, 22% in K. Tall cholam, 107% in varagu, 16% in redgram and 28% in cotton.

# News from Abroad

## Courtship : The Violent Phase

Ms. Rosemary Bogal-Allbritten, Associate Professor of Social Work at Murray State University in Kentucky has found that courtship violence—threats, slaps and beatings by boyfriends and girlfriends—is on the rise in American Universities. According to an estimate at least 2 out of the every 10 college students are affected by courtship violence. However, there is not much of awareness on the campuses of this problem. According to a national survey conducted by Mr. William Allbritten, Director of Counselling at Murray State University, most college officials knew of only one to 10 incidents of such violence on their campuses. But a study of students at the Murray State three years ago indicates at least 1/5 of all college students experience some courtship violence and 60% know of someone involved in a violent relationship. Abuse included threats, shoving, slapping, choking, attacks with weapons and sexual assault. Ms. Sally Torreywn, Director of the Emporia State Lee Women's Centre in Kansas has compiled this scenario of typical, advanced courtship violence.

"It's fairly serious relationship and one, or maybe both, experienced some physical abuse as a child. The man has a volatile temper, is jealous and has trouble adjusting to college demands. The woman is emotionally dependent on him. They argue a lot, but she's more adept at it. They've broken up several times.

After an episode of violence, he's contrite. He promises it won't happen again. She wants to believe him. They feel closer in the aftermath of violence, at least until the next time."

In a paper presented to American Sociological Association, Ms. Jan Stets and Ms. Maureen Pirog-Good of Indiana University observed that most courtship violence occurred after the initial dating stage when the partners are no longer on their best behaviour and enter into a brutal power struggle.

Out of a random sample of 505 students who had a girlfriend or boyfriend within the past year, the researchers chose 126 males and 20

females to study. Nineteen per cent of the women and 12 per cent of the men said their partners had inflicted violence on them.

## Forign Students in USSR

Over 100,000 students from 49 countries are now studying free of charge (education in the USSR is free for all) at Soviet higher and specialised secondary schools and getting monthly grants. The Soviet Union shoulders practically all the spending on their training and social maintenance. Those coming from countries with a hot climate get warm clothing. During their summer holidays foreign students tour the country or are accommodated at health-building centres and holiday hotels, for which they have to pay little or nothing at all. Besides, the graduates get a free ticket to go back to their home country and most of the would-be trainees coming from developing countries get a free ticket to the USSR.

Foreign students are training in over 250 specialities at over 500 Soviet academic and research institutions. Probationers from developing countries are getting training as building engineers, machine-builders, chemical technologists and so on. Training of doctors for developing countries with due account for the disease specificities is in the focus of attention. All training is geared to the specific conditions—climatic, medico-biological and social— of the probationers' countries.

Over the last 30 years the Soviet Union has trained more than 200,000 skilled specialists (18,000 of them have become Candidates of Science) for socialist and developing countries.

## IIEP Training & Research Programmes

Under its Medium-Term Plan for 1984-1989, the International Institute for Educational Planning (IIEP), Paris, has taken up new training and research activities. In the latter field, three major themes would be explored: 'The implications for educational planning of scientific and technological development policies'; 'The diversification of educational activities and the problems raised for educational planning by efforts to articulate them in a development perspective' and 'The role of educational planning in the decision-making and implementation process'. Studies had already begun in ten countries for the first theme and in eight countries for each of the other two themes.

As regards training, the Institute continued to develop and consolidate not only its experience of the annual nine-month training programme which it organizes for 50 trainees after a previous period of training in their countries of origin, but also its programme of intensive courses, geared to specific situations and problems in selected Member States. Five workshops and seminars were held during the biennium on subjects relating to educational planning in five different countries.


# TATA INSTITUTE OF SOCIAL SCIENCES

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A copy of the brochure and application can be obtained from the Assistant Registrar (Academic) of the Institute by sending a Demand Draft of a Bank for Rs. 15/- in favour of the Institute.

The **last date** for receipt of the completed application form with a registration fee of Rs. 20/- is **October 15, 1986.**

**N. Krishnamoorthy**
**REGISTRAR**

# CALENDAR OF EVENTS

| Proposed Dates of the Event | Title | Objective | Name of the Organising Department | Name of the Organising Secretary/Officer to be contacted |
|---|---|---|---|---|
| October 5-7 1986 | International Seminar on Gandhi and Contemporary Ideologies regarding Freedom, Peace and Equality. | To evaluate the Contemporary Ideologies regarding Freedom, Peace and Equality in the context of Gandhiji's Contribution. | Institute of Gandhian Thought and Peace Studies, Allahabad University in collaboration with the Indian Society for Gandhian Studies. | Dr. J.S. Mathur, Director and Dr. O.N. Srivastava, Associate Director, Gandhi Bhawan, Allahabad University, Allahabad. |
| November 9-10, 1986 | National Conference on Distance Education | Topics proposed to be covered are: (i) Concept of Distance Education; (ii) Forms of Distance Education; (iii) Course Designing and Preparations; (iv) Role of Media in Distance Education; (v) Financing of Distance Education; (vi) Student Support Services; (vii) Evaluation Methodology. | Association of Indian Universities, New Delhi; Indira Gandhi National Open University, New Delhi; and Gujarat University, Ahmedabad | Prof. B. N. Koul, Indira Gandhi National Open University, K-76, Hauz Khas, New Delhi. Mr. M.M. Ansari, Project Director (Research), Association of Indian Universities, 16 Kotla Marg, New Delhi |
| November 15-17, 1986 | Seminar on Problems, Aspects and Areas of Research in Music | To identify the latest trends in the research in music. | Department of Musicology and Aesthetics, Indira Kala Sangit Vishwavidyalaya, Khairagarh. | Dr. (Smt) Subhdra Chowdhary, Head, Department of Music, Indira Kala Sangit Vishwavidyalaya, Khairagarh. |
| Nov. 23-Dec. 13, 1986 | All India Short-Term Institute on Polymer Technology | To make an awareness of the recent developments in polymer science/technology to Chemistry teachers in universities and colleges | Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology, Cochin. | Prof. D. Joseph Francis, Director of the Short-term Institute, C/o Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology, Cochin. |
| December 12-14, 1986 | All India Seminar on Psychology, Sociology, Sports and Allied Sciences. | To acquaint the teachers and Professional personnel in Physical Education, Psychology and Sociology with the latest trends of research in Sports and Allied Sciences. | Degree College of Physical Education, Amravati. | Dr. V.D. Bapat, Organising Secretary, C/o Degree College of Physical Education, Amravati. |
| December 14-21, 1986 | All India Workshop-cum-Seminar on improvement in teaching of English. | To evaluate the method of English language teaching with special reference to curriculum development | Shree J.B. Thackker Commerce College, Bhuj | Prof. V.J. Jadeja, Head, Deptt. of English, Shree J.B. Thackker Commerce College, Bhuj. |
| December 15-17, 1986 | Indian Geotechnical Conference—1986 | Designed to seek a consensus on questions of current significance in geotechnical engineering relevant to the Indian context. | Indian Geotechnical Society—Delhi Chapter | Prof. Shashi K. Gulhati, Organising Secretary, IGC-86, Civil Engineering Department, Indian Institute of Technology, New Delhi. |
| December 16-18, 1986 | International Symposium on Electronic Devices, Circuits and Systems | To provide a forum to research workers all over the world for exchange of informational and technical perceptions in electronic devices, circuits and systems. | Indian Institute of Technology, Kharagpur. | Prof. N.B. Chakrabarty, Department of Electronics and Electrical Comm. Engg., IIT, Kharagpur. |

# COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

## Advertisement No. 13/86

It is proposed to appoint one Scientist-F for the National Chemical Laboratory, Pune-411 008.

The R & D work of the laboratory is carried out in seven research divisions : (1) Biochemistry, (2) Inorganic Chemistry, (3) Organic Chemistry, (4) Physical Chemistry, (5) Polymer Chemistry, (6) Chemical Engineering; and (7) Process Development. NCL has modern analytical and testing instrumental facilities such as photoelectron spectroscope, Fourier Transform NMK spectometer and X-ray fluorescence spectrometer etc. The laboratory has a staff of 1150 of which more than 225 are qualified Scientists.

**Job Requirements :** The incumbent would be required to provide high quality R & D leadership in basic and applied research in polymer chemistry. He will be expected to expand, intensify and innovate the efforts in the existing polymer chemistry division which has major research programmes in the areas of polymer synthesis, modification and characterisation.

**Qualifications :** The candidate should possess high academic qualifications (including Ph.D.) in polymer chemistry or in any other equivalent branch of chemistry or technology with 10-12 years research experience in polymer chemistry. He should have established record of research excellence as evidenced from his publications.

**Salary/Conditions of Service :** The scale of pay attached to this post is Rs. 2000-125 2-2500 plus allowances as admissible under Central Govt. Rules. This is a contractual appointment initially for a period of six years. The contract is extendable and the incumbent can also be confirmed. Consultancy subject to an upper limit of Rs. 15,000/- per year is permissible. Free medical aid and leave travel concession are also permissible for the family as per Govt. rules. Residential accommodation will be provided on payment of usual licence fee subject to availability.

**Age :** Preferably below 50 years, relaxable in deserving cases.

A duly constituted 'Screening Committee' will decide on the number of Scientists to be invited to meet the full Selection Committee for discussion. The decision of the Council in this behalf will be final. Applications from employees working in Govt. Departments, Public Sector Organisations and Govt. funded research agencies will be considered only if forwarded through proper channel and with a clear certificate that the applicant will be relieved within three months of receipt of the appointment order.

Those interested may kindly send in their curriculum vitae in duplicate in the form obtainable from the Joint Secretary (Admn.), Council of Scientific and Industrial Research, Rafi Marg, New Delhi-110001, **on or before 10th November, 1986.** The literature about the laboratory, if required, can be had from the Office of the Director, National Chemical Laboratory, Pune-411 008 on request.

# AIU Library

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month' while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research scholars and students of education are welcome to use these resources. The Library is open from 9-30 a.m. to 5-30 p.m. Monday through Friday. Access can also be had through inter library loan for which requisition must be made through your Librarian.

## A List of Research Scholars Registered for Doctoral Degrees of Indian Universities

### SOCIAL SCIENCES

**Psychology**

1. Dershambika. M. *Childless married women: An analytical study.* Kerala. Dr. S. Jayakumari.

2. Ganesh, Lekha. *Social, psychological and medical factors related to obstructive complications.* Kerala. Dr. Krishnaprasad Sreedhar.

3. Geetha, S. *Cognitive functions of college students in relation to their medium of instructions at school level.* Kerala. Dr. B. Dharmangadan.

4. Janaki, M. *A psychological study of orphan pupils.* Kerala. Dr. S. Jayakumari.

5. Jayasree, V. *Relationship of anxiety and anxiety reducing interventions to complications of pregnancy and labour.* Kerala. Dr. Krishnaprasad Sreedhar.

6. Mahmood, M. *Psychological corelates of religious practices in Islam.* Kerala. Dr. V. George Mathew.

7. Sumaranjitha, L. *The cognitive emotional and social correlates of irrational beliefs among first year college girls: An analytical study.* Kerala. Dr. Krishnaprasad Sreedhar.

8. Varma, S. Seetha. *A comparison of students of the performing arts with students of sciences and the humanities along certain selected personality variables.* Kerala. Dr. K. Devadasan.

**Sociology**

1. Payyapilly, Jose. *Impact of training on deaf: A comparative study of the trained and untrained adult deaf of Madhya Pradesh.* Devi Ahilya. Dr. R.K.P. Chandekar.

**Economics**

1. Rahman, Safa Ladan. *Foreign trade of Iran with special reference to exports since* 1975. Shivaji. Dr. B.B. Kawade.

2. Gupta, Rashmi. *Madhya Pradesh mein vikray kar yojna kal mein,* 1961-62 *se* 1984-85 *tak.* Devi Ahilya. Dr. M.V. Kapde.

3. Jadhav, Kiran Dinkarrao. *Socio economic impact of sugar cooperatives in Satara District.* Shivaji. Dr. T.G. Naik.

**Law**

1. Shrejudden, M. *Judicial review of preventive detention.* Kerala. Prof. R. Sankaradasan Thampi.

**Education**

1. Kulkarni V.G. *An investigation into class-room management behaviour of teacher and their training for effective class-room management.* Shivaji. Dr. A.N. Joshi.

2. Radhakrishnan, K. *A study of the problems and prospects of vocationalisation of school education in Kerala.* Kerala. Dr. P.M. Jaleel.

3. Varghese, Mary. M. *A study on the influence of health status on learning for preparation of a school health care programme.* Kerala. Dr. Vasantha Ramkumar.

### HUMANITIES

**Philosophy**

1. Dubey, Ramesh Chandra. *Sri Aurobindo yoga ke prakash mein Buddh yoga ka alochanatmak adhyayan.* Gorakhpur. Dr. A.K. Singh.

2. Pandey, Ram Ashray. *Baudh evan Jain darshan mein upasana ke swaroop ka alochanatmak adhyayan.* Gorakhpur. Dr. A.K. Singh.

3. Premkumar, A.P. *A hermenutic approach to Kiekegaard's philosophy with reference to the modern predictment.* Kerala. Dr. K. Saratchandran.

4. Shahi, Kumudini. *Gita ke prakash mein sankhya darshan ka alochanatmak adhyayan.* Gorakhpur. Dr. A.K. Singh.

5. Singh, Kapil Deo. *Baudh anatmavada: Ek punarmulyankan.* Gorakhpur. Dr. A.K. Singh.

6. Sinha, Anju, *Gita ke prakash mein Patanjali Yoga ka alochanatmak adhyayan.* Gorakhpur. Dr. A.K. Singh.

7. Sreelatha, M.S. *The political philosophy of Bertrand Russel.* Kerala. Dr. K. Saratchandran.

**Language and Literature**

*English*

1. Gangadharan Nair, N. *Art and commitment in the plays of Lillian Hellman.* Kerala. Dr. V. Rajakrishnan.

2. Geethakumari, N.B. *The impact of Gandhi and Gandhian thought on post independence Indian fiction in English.* Kerala. Dr. K. Ayyappa Panicker.

3. Lekha, K.S. *George Eliot's prose works: A feminist perspective.* Kerala. Dr. K. Ayyappa Panicker.

*Hindi*

1. Geetha, S. *A study of the dramatic works of Vishnu Prabhakar.* Kerala. Dr. S. Thankamony Amma.

2. Krishna Pillai, K. *The poetry, culture and philosophy* in *Ramacharitamanas and Adhyatma Ramayanam Kilippattu.* Kerala. Dr. S. Thankamony Amma.

3. Sarangadharan, C. *A comparative study of the travelogues in Hindi and Malayalam.* Kerala. Dr V.P. Mohammadkunju Matharu.

**History**

1. Sheelakumari, S. *Mannathu Padmanabhan: Impact of his socio-political activities on Kerala.* Kerala. Dr. N. Sasidharan Nair.

# THESES OF THE MONTH

## A List of Doctoral Theses Accepted by Indian Universities

### SOCIAL SCIENCES

**Library Science**

1. Garg, B.S. *Personality and job satisfaction of librarians of universities of Delhi and Rajasthan: A multivariate analysis.* Rajasthan.

**Psychology**

1. Angira, Krishan Kumar. *Effects of physical attractiveness type of transgression and sex of transgressor on the juridic judgement of male and female jurors.* Meerut.

**Sociology**

1. Barik, Bishnu Charan. *Migration and agrarian structure: A study of Ganjam District in Orissa.* Patel.

2. Biswas, Upendranath. *A study of criminal investigation in India.* Calcutta.

3. Mahajan, Kamlesh. *Antecedents, components and consequences of political efficacy among lower sections in an urban setting.* Meerut.

4. Mishra, Shital Prasad. *Arthik vikas evam parivar sanrachana.* Gorakhpur.

5. Singhai, Saroj. *Indore Nagar kee mahavidyalayeen kishoriyon kee samajik ruchiyan evam abhiruchian.* Devi Ahilya.

**Social Anthropology**

1. Chakraborti, Dilip Kumar. *Persistence of culture among the Great Andamanese.* Calcutta.

2. Das, Nava Kishor. *The politico-rural aspects of the segmentary social system of the Zounuo-Keyhonuo Naga, (The Southern Angami).* Gauhati.

3. Khan, Chornur Gaji Hussain. *Marriage alliance and its remifications in two Karnatak Villages.* Karnatak.

4. Krishna Reddy, B. *A tribe in transition: The Sugali of Rayalseema Region of Andhra Pradesh.* Venkateswara.

**Social Work**

1. Jayasthotrani, Biruduganti. *Influence of role-stress on functioning of complex organisation: A case study of King George Hospital, Visakhapatnam.* Andhra.

**Political Science**

1. Al-Rfouh. Faisal Odeh Matlag. *The United Nation's involvement in Palestine.* Meerut.

2. Deshmukh, Kishore. *Bharat mein lok kalyankari rajya siddhant aur vyavhar: Madhya Pradesh rajya ke vishesh sundarbh mein.* Ravishankar.

3. Kapoor. Suneera. *Concept of freedom in the writings of Sri Aurobindo Ghosh and Bal Gangadhar Tilak.* HP.

4. Mahawal, Shakuntla. *The extradition treaties of India: An appraisal.* Rajasthan.

5. Mohanty, Biswanath. *Some aspects of politicization of Indian educational system: A case study of Utkal University.* Utkal.

6. Shamsher Singh. *Panchayati raj in Haryana: A study of grass-root politics.* H.P.

7. Shukla, O.N. *Nuclear non-proliferation treaty and the threshold powers: A study of India's attitudes.* JNU.

8. *Singh, Khwairakpam Ibochou. British administration in Manipur, 1891-1947. Gauhati.*

**Economics**

1. Bhuiyan, Mohammad Shahidur Rehman. *Impact of farm size and tenurial status of land on resource productivity in Mymensingh District of Bangladesh.* HAU.

2. Chourasia, Arvind Kumar. *Arthik vikas mein laghu udyogon kee bhoomika ka vishleshanatmak adhyayan: Sivani Jile ke vishesh sandarbh mein.* HS Gour.

3. Dhanush Kumari, R. *The recent trends in area output of groundnut in relation to current and future demand in Tamil Nadu.* Madurai.

4. Joshi, R.P. *Participative management in public enterprises: A case study of workers' participation in management of State Electricity Board.* Rajasthan.

5. Krishna Kumari, D.B.L. *Andhra Pradesh Co-operative Agricultural Development Bank: A study in growth, structure and performance.* Venkateswara.

6. Manonmoney, N. *Economics of cropping pattern in Madurai District.* Madurai.

7. *Mathur, Artee. Analysis of financial statement of Tobacco industry in India.* Rajasthan.

8. Mishra, Shyam Manohar. *Saga sambhag mein imarati evam jalaoo lakri ka utpadan evam vipanan.* HS Gour.

9. Munjar, Satish. *Performance budgeting in Bank of India.* Rajasthan.

10. Nangia, Parveen Kumar. *Structure of child employment: A case study of Delhi in search of likely determinants and consequences.* JNU.

11. Perumal, S. Velayudha. *Wage structure in the plantations in Kanyakumari District.* Madurai.

12. Sanjaya, Baru. *Evolution of sugar policy in India, 1932-82: The political economy of state intervention.* JNU.

13. Savaraiah, G. *A study of the structure, conduct and performance of primary agricultural credit societies in Prakasham District, Andhra Pradesh.* Venkateswara.

14. Sharma, Anjali. *Managing an inflation ridden economy with reference to Indian experience during the period.* 1969-1980. Meerut.

15. Sunil Kumar. *Economics of farm mechanisation in Bulandshahar District: A cost-benefit analysis.* Meerut.

16. Upadhyay, Hari Narayan. *Study on marketing of seed potato in Orissa.* Utkal.

17. Velan, G. *Trade Union Movement in the cotton textile industry of Madurai District.* Madurai

18. Vyas, Nila Kalidas. *A study on income education and some related aspects of rural households.* Bhavnagar.

**Law**

1. Mann. T.S. *The law relating to life insurance in India.* Vikram.

2. Mohammad Aftab Hussain. *Socio-legal study of centre-state relations under the Indian Constitution with reference to some selected states.* Gauhati.

3. Singh, Naorem Sanajaeba. *A critical investigation in the working and the procedure of the industrial tribunal.* Gauhati.

4. Singh, Ravi Karan. *Restrictive trade practices and public interest with special reference to the Monopolies and Restrictive Trade Practices Act*, 1969. Meerut.

**Education**

1. Biswas, Nikunja Behari. *A study of the curriculum for primary education in Bangladesh.* Baroda.

2. Desai, Shantadevi Shiddabasanagouda. *A critical study of science teaching programme at the middle school level in Karnatak State.* Karnatak.

3. Hamid Hussain. *A study of high school teachers' role discrepancy in Kashmir in relation to their morale, teaching effectiveness and academic alienation.* Meerut.

4. Krishna Kumari. *An experimental study of interaction effects of deductive inductive strategies, creativity and learning objectives on achievement.* Meerut.

5. Mathew, A. *Protestant missionary attitudes towards higher education and nationalism in Madras Presidency*, 1872-1930. JNU.

6. Mathur, Mahesh Chandra. *The factors influencing the streaming of students with reference to their interest, learning style and certain psycho-social pressures.* Meerut.

7. Mishra, Monica Vinayak. *A study of meaning in life, stress and burrout in teachers of secondary schools in Calcutta.* Baroda.

8. Oberoi, Suresh Chander. *A study of alienation and role conflict in the employees in relation to identified supervisory practices.* Meerut.

9. Sarita Rani. *A study of objective programmes infrastructural facilities and perceived effectiveness of guidance services in Delhi schools.* Meerut.

10. Savithri, V.V. *A study of personality characteristics and behavioural dimension of educable mentally retarded children studying in city of Bangalore.* Bangalore.

11. Ubon Suvannachairop. *The needed competency to be developed in the teacher training programme for the primary school English teachers in Thailand under the new curriculum.* Panjab.

12. Vijayalaxmi, N. *A critical study of contribution of Veerashaiva Maths in spread of education with special reference to weaker section in Karnatak.* Karnatak.

**Commerce**

1. Arora, Satish Kumar. *Road Transport in Panjab.* Punjabi.

2. Bhasin, M.L. *The problem of price level changes and financial statements : A case study of Bharat Heavy Electricals Limited.* Meerut.

3. Bhuleshkar, Ashok Vasant. *Efficacy of differential rates of interest scheme benefit/cost approach.* Baroda.

4. Chandrayya, V. *Structural changes in the credit deployment policies and practices of commercial banks in India : A case study of Andhra Bank.* Venkateswara.

5. Jayachandra, K. *Cost of returns of the dairy enterprise and institutional finance for dairy development.* Venkateswara.

6. Mital, Baby. *A critique of the gold policy of the Government of India.* Meerut.

7. Mittal, Ravi Kant. *Asian Development Bank and the economic development of Asian countries.* Meerut.

8. Ranganayakulu, Kurmala Chenchu Surya. *Development of Khandsari Industry : A study of production, marketing and socio economic characteristics of Khandsari Units in Andhra Pradesh.* Andhra.

9. Sarkar, Ganesh Chandra. *An enquiry into the reporting practices of commercial banks.* North Bengal.

10. Sathe, D.M. *A critical study of assessment of salaried class with special reference to M.P.* Vikram.

11. Sharma. Sushil Kumar. *A new approach to inventory management and the problems of price fluctuations : A case study of Modipon Limited, Modinagar.* Meerut.

12. Soji, Omowole Jones. *India's trade and economic relations with selected African countries, Ghana, Libya, Zambia, Nigeria and Kenya.* HS Gour.

13. Srinivas, M. *Organisation and management of central Co-operative banks in Andhra Pradesh : A case study.* Kakatiya.

14. Tanwar, Bhulan Singh. *Marketing of milk and milk-products : A case study of Delhi Milk Scheme.* Meerut.

**Folklore**

1. Paul, Binodbehari. *Bengi folklore in North Eastern region and adjacent area.* North Bengal.

**Management**

1. Jain, Ravi Kumar. *Working capital management of state enterprises in Rajasthan.* Rajasthan.

# CLASSIFIED ADVERTISEMENTS

## INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

### ADVERTISEMENT No. C-78/86

Applications are invited on plain paper from the citizens of India for filling up the following temporary positions for various PROJECTS undertaken in the Institute. All the positions are temporary initially for a period of one year and tenable only for the duration of the projects. The requisite qualifications, experience etc. are given below:

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**Fellowship:** Rs. 950/- p.m.

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Specialisation: Master's degree in *Inorganic or Analytical Chemistry.*

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**Age Limit**

Upper age limit for SRF shall be 30 years (or 25 years for JRF) as on 1-4-1986.

In case the candidate with requisite research experience is not available but otherwise if he is qualified, his case will be considered for the appointment as Junior Research Fellowship on a fellowship of Rs. 800/- p.m.

2. **Advice Regarding Quality Control of Concrete and related Materials (M/s. Mitsui & Co.)**

**Project Engineer** (1 post)

**Consolidated Salary:** Upto Rs. 1600/- p.m. depending upon qualifications and experience.

**Qualification and Experience**

Graduate in Civil Engineering preferably with one year's experience in related field.

**Duration of the Project:** About 2 years.

3. **Development of good quality recyclable Lead Alloy Josephson Junctions and Squid Electronics and Instrumentation (DST)**

(i) **Project Scientist** (1 post)

**Scale of Pay:** Rs. 700-40-1100-50-1600 (*Total emoluments on the minimum of the scale* : Rs. 2123/-)

**Qualifications and Experience**

Ph.D. in Physics or Chemistry with three years research experience in Solid State Physics/ Chemistry. Experience with low temperature desirable.

**Age:** Preferably below 30 years. Relaxable in deserving cases.

(ii) **Senior Research Assistant** (1 post)

**Scale of Pay:** Rs. 550-25-750-EB-30-900 (Total emoluments on the minimum of the scale: Rs. 1673/-).

**Qualifications and Experience**

M.Sc. Physics or B.Tech. with electronics. Experience in *Microwave measurements desirable.*

**Age:** Preferably below 30 years. Relaxable in deserving cases.

4. **Optimisation of Parameters for Sub-Surface Powder Injection from top along with Inert Gas Purging from bottom (RDCIS/SAIL)**

**Project/Research Engineer** (1 post)

**Consolidated Salary:** Rs. 1500/- p.m. *Higher start may be considered in* case of deserving candidates with higher qualification or relevant experience.

**Qualifications**

B.Tech. in Metallurgical or Chemical Engineering *or* M.Sc. in Physical *Chemistry/Physics.*

**Nature of Work**

Literature survey in the area of Ladle Metallurgy, experimental work on water-modelling and in Laboratory furnaces.

The appointments are for time bound projects and the candidates are expected to work mainly for the successful completion of the project. Candidates not found suitable for the post applied for may be considered for lower post(s).

Candidates having the requisite qualifications and experience may apply on plain paper giving position applied for, title of the project, name, mailing address, date of birth, academic qualifications and experience with copies of certificates, testimonials to the Registrar, Indian Institute of Technology, Powai, Bombay-400 076 within 15 days. Candidates called for interview will be required to attend at their own expenses. The candidates who wish to apply for more then one post should apply separately.

Reservations for SC/ST candidates will be as per Government of India rules.

**REGISTRAR**

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## UNIVERSITY OF KALYANI

**Kalyani Nadia-741235**

**Advertisement No. 3/86 (2nd)**

**Dated : 10-9-1986**

Applications in prescribed form are invited for the following posts:

| | |
|---|---|
| 1. Reader in English | one post |
| 2. Lecturer in History | one post |
| 3. Asst. Medical Officer | one post |
| 4. Dean of Students' Welfare | one post |
| 5. Reserach Associate (DSA), Department of Botany | one post |
| 6. Finance Officer | one post |
| 7. Part-time Medical Officer | two posts (one for lady Doctor) |

**Scale of Pay**

**Reader:** Rs. 1200-50-1300-60-1900/-. **Lecturer and Asstt. Medical Officer:** Rs. 700-40-1100-50-1600/-.

**Dean of Students' Welfare and Finance Officer** : Rs. 1500-60-1800-100-2000-125-2500/-.

**Research Associates (DSA), Department of Botany** : Rs. 1600/-.

**Part-time Medical Officer** : Rs. 400/-. (fixed).

**Specialisation:** for 2: Economic History of India; and

for 5: M.Sc. degree in Botany (first or high second class: minimum 50% makrs) following an Honours degree in the same subject followed by a Ph.D. degree with two years' research experience in Molecular Taxonomy/ Molecular Genetics/Molecular Pathology.

**Age:** Reader: Preferably below 50 years.

Finance Officer and Dean of Students' Welfare: Age not less than 40 years.

Relaxable in the case of exceptionally qualified candidates.

Asstt. Medical Officer and Part-time Medical Officer: Age not less than 30 years. Relaxable in the case of exceptionally qualified candidates.

Lecturer and Research Associate (DSA): Preferably below 40 years.

The principle reservation of posts for the candidates belonging to scheduled castes and scheduled tribes shall be followed to the extent possible as per the order issued by the State Govt. from time to time.

A circular containing details of qualifications, pay and allowances and other relevant information may be had from the office of the undersigned from 16-9-1986 between 11-30 a.m. and 3 p.m. on working days (Saturday upto 1 p.m.) separately along with the application form on payment of Rs. 7.50 by current crossed Indian Postal Order in favour of the 'University of Kalyani' personally or by sending a self-addressed stamped (Re. 1.40) envelope (25 cm x 12 cm). Application forms complete in all respects according to the instructions given in the circular must reach the office of the undersigned on or before **6-10-1986.**

Those who applied in prescribed form in response to our previous advertisement No. 3/83 dated 12-4-1983 for the post of Asstt. Medical Officer (sl. no. 3), Adv. No. 1/84 dated 24-1-1984 for the post of Dean of Students' Welfare (sl. no. 4) and Adv. No. 3/86 dated 25-8-1986 need not apply again.

The University intends to fill up not only the present posts but also to form a panel for vacancies to occur in future within a year from the date of approval of panel by the Executive Council.

**P. Sircar**
**REGISTRAR**

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## OSMANIA UNIVERSITY

**HYDERABAD-500 007 (A.P.)**

**Advertisement No. 6/86.**

**Dated: 17th Sept. '86**

Applications in the prescribed form together with the registration fee of Rs. 5/- payable through Demand Draft/I.P.O. drawn in favour of the Registrar, Osmania University are invited for the following posts in the University Service so as to reach the undersigned in person or by post on or before **18th October, 1986.**

| | |
|---|---|
| 1. Professor of Botany | Two |
| 2. Professor of Chemistry | Three |
| 3. Professor of International Law | One |
| 4. Professor of Technology | One |
| 5. Reader in Botany | One |
| 6. Reader in Zoology (VI Plan) | One |
| 7. Reader in Statistics | One |
| 8. Reader in Arabic | One |
| 9. Reader in Marathi | One |
| 10. Reader in Urdu | One |
| 11. Reader in Psychology | One |
| 12. Reader in Technology | Three |
| 13. Lecturer in Statistics (Temp.) | One |
| 14. Lecturer in Marathi | One |
| 15. Lecturer in Library and Information Science | One |
| 16. Lecturer/Programmer (Computer Unit Dept. of Business Mangt.) | One |
| 17. Lecturer in Elect. Engg. (Kothagudem School of Mines) | One |
| 18. Lecturer in Theatre Arts | One |
| 19. Lecturer in Linguistics | One |

**Scale of Pay**

| | |
|---|---|
| Professor | Rs. 1500-2500 |
| Readers | Rs. 1200-1900 |
| Lecturers | Rs. 700-1600 |

Age

| | |
|---|---|
| Professors | Not above (50) years. |
| Readers | Not above (40) years. |
| Lecturers | Not above (35) years. |

(i) Age limit does not apply to the employees of this University.

(ii) Relaxation in age to the extent of (5) years shall be granted to the candidates belonging to SCs, STs and BCs.

(iii) Relaxation in age to the extent of (5) years shall be granted to be teachers of affiliated colleges who have put in atleast five years of service in any of the Colleges affiliated to the Osmania University.

**Note:** 14%, 4% and 25% reservations are made for the candidates belonging to SCs, STs, and BCs respectively to the posts of Readers and Lecturers only.

Applications foms can be had from the Director, Dept. of Publications and University Press, Osmania University, Hyderabad-7, A.P., on payment of Rs. 4.50 in person or by Demand Draft /I.P.O. together with the postal charges for ordinary/registered post made payable to the Director and by sending a self addressed envelope of $14\frac{1}{2}$ cms $\times$ $26\frac{1}{2}$ cms.

Full particulars can be had from the Director on requisition at free of cost by sending a self-addressed stamped envelope.

**REGISTRAR**

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## THE UNIVERSITY OF BURDWAN

**RAJBATI : BURDWAN**
**WEST BENGAL**

**Advertisement No. 4/86-87**
**Dated : 16 September, 1986**

Applications in the prescribed form are invited for the following posts in the approved scales of pay viz. Professor and Librarian — Rs. 1500-60-1800-100-2000-125/2-2500/-; Reader Rs. 1200-50-1300-60-

1900/-; and System Engineer — Rs. 1100-50-1600/ Plus dearness and other allowances and pensionary benefits according to the Statutes of the University.

| | | |
|---|---|---|
| A. | Professor of Sociology | One post |
| B. | Professor of Physics | One post |
| C. | Reader in Hindi | One post |
| D. | System Engineer | One post |
| E. | Librarian | One post |

**MINIMUM QUALIFICATIONS**

**For Professorship**

An eminent scholar with published work of high quality actively engaged in research. About ten years' experience of teaching and/or research. Experience of guiding research at doctoral level.

**OR**

An outstanding scholar with established reputation who had made significant contribution to knowledge.

**For Readership**

Good academic record with a doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research or (ii) innovation in teaching methods or (iii) production of teaching materials.

About five years' experience of teaching and/or research provided that at least three of these years were as Lecturer or in an equivalent position.

This condition may be relaxed in the case of candidates with outstanding record of Teaching/Research.

**For System Engineer**

**Essential Qualifications :** M.E./M. Tech. in Computer Science with two years of Experience **OR** B.E. /B. Tech./M. Sc. (Physics/ Mathematics/ Statistics/ Chemistry) with three years of experience in Computer Science.

**Desirable** : Experience in software maintenance.

**For Librarian**

(a) **Essential**

(i) Uniformly good academic record with a B+Master's Degree in Library Science or a B+Master's Degree followed by a Bachelor's Degree in Library Science.

(ii) At least 10 years' experience of working in Administration/ Management position in a Library of a University or an Institute of Post-graduate Studies.

(iii) Age not less than 40 years. Relaxable in case of exceptionally qualified candidates.

**Desirable**

(i) A Doctorate Degree or published research work of similar merit.

(ii) Knowledge of at least one foreign language (other than English).

**Desirable Qualifications : Specialisation OR Proficiency**

For A : Any branch of the subject.
For B : Laser Physics
For C : Any branch of the subject.

The Executive Council may on the recommendation of the appropriate Selection Committee, waive any of the aforesaid requirements in view of the candidate's specialised knowledge in the subject. The choice of the Committee may not necessarily be confined to those who apply formally. **Higher initial pay may be considered in appropriate cases.**

For application forms and other particulars please apply to the Registrar, University of Burdwan, Rajbati, Burdwan with a self-addressed stamped (0.80p.) envelope (9"X4"). The prescribed forms should be obtained within 6th October, 1986 positively.

Last date for submission of application with the requisite fee of Rs. 5/- is **October 20, 1986.**

**P. Banerjee**
**REGISTRAR**

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## SARDAR PATEL UNIVERSITY

**VALLABH VIDYANAGAR-388 120**

**(Gujarat)**

**Notification No. EST/5 (1986-87)**

Applications are invited in the prescibed forms available from University Office on payment of Rs. 5/- in cash or by Indian Postal Order for the following posts so as to reach the undersigned on or before **25-10-1986.**

1. **Professor each in**

(i) Chemistry (Preferably in Physical /Polymer Chemistry)
(ii) Computer Science (For Master of Computer Application Course)
(iii) Commerce

**Scale of Pay:** Rs. 1500-60-1800-100-2000-125-/2-2500.

2. **Reader each in:**
(i) Chemistry (Industrial)
(ii) Home Science (Foods and Nutrition)
(iii) Commerce
(iv) Sociology

**Scale of Pay :** Rs. 1200-50-1300-60-1600-Assessment-60-1900.

3. **Lecturer each in.**

(i) Chemistry (Inorganic Chemistry)
(ii) Chemistry (Theoretical Chemistry)
(iii) Life Science
(iv) Computer Science (Two Posts) (For M.C.A. Course)

**Scale of Pay :** Rs. 700-40-1100-50-1300-Assessment-50-1600.

4. **Project Officer**

(National Adult Education Programme) (Temporary)

**Scale of Pay:** Rs. 700-40-1100-50-1300-Assessment-50-1600.

5. **Assistant Librarian**

**Scale of Pay:** Rs. 700-40-980-EB-40-1100-50-1200-EB-50-1300.

6. **Assistant Curator**

For University Museum Temporary)

**Scale of Pay :** Rs. 500-25-650-EB-25-750-EB-30-900.

7. **Programmer**

For G.H. Patel Computer Centre.

**Scale of Pay :** Rs. 700-40-980-EB-40-1100-50-1200-EB-50-1300.

8. **Technical Assistant**

**Scale of Pay:** Rs. 500-25-750-EB-30-900.

9. **Tape Disc Librarian**

**Scale of Pay:** Rs. 330-10-380-EB-12-440-EB-15-560.

Details of the prescribed qualifications will be supplied alongwith the application forms.

All the posts except at Sr. No. 4 and 6 carry the benefits of Dearness Allowance, Provident Fund, Gratuity and Pension Scheme as per University rules. Posts at Sr. Nos. 4 and 6 carry the benefit of Dearness Allowance only.

Preference will be given to the qualified candidates belonging to Scheduled Castes/ Scheduled Tribes, Socially and Educationally and /or Economically backward class. Candidates belonging to these castes must attach a certificate from appropriate authority.

**R.C. Thakkar**
**REGISTRAR**

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# COCHIN UNIVERSITY OF SCIENCE & TECHNOLOGY

## COCHIN-682 022

**No. AC. A1/441/85**

## ANNOUNCEMENT OF COURSES FOR 1986-87

**1. Department of Applied Chemistry, Cochin-22**

**M.Sc. (Applied Chemistry)**

Eligibility : B. Sc. Degree with Chemistry main and Physics and Mathematics as subsidiaries with 55% marks in Chemistry.

**2. Department of Applied Economics, Cochin-22**

**M. Phil. (Applied Economics)**

Eligibility : Master's Degree with 50% of aggregate marks.

**3. Department of Computer Science, Cochin-22**

**M. Tech. (Computer and Information Science)**

Eligibility:

(1) At least II Class B.Sc. (Engg.) or equivalent degree in Electronics, Electronics and Communication Engineering, Electrical Engineering, M.Sc. (Physics with Electronics), M.Sc. Mathematics, M.Sc. in Computer Science, 'GRAD', 'IETE' and AMIE

(2) Pass in the GATE (Graduate Aptitude Test in Engineering) Examination. Those who have not passed the GATE examination may also apply, but they will be considered for the remaining seats if any, on their passing a written test and an interview.

**4. Department of Electronics, Cochin-22**

**M. Tech. (Electronics)**

Eligibility:

(1) At least II Class degree in B.Sc. (Engg.) or equivalent in Electronics, Electronics and Communication Engineering, Electrical Engineering or M.Sc. degree in Physics (with Electronics/Industrial Physics as specialisation)/ AMIE/ GRAD/ IETE.

(2) Pass in the GATE examination (Graduate Aptitude Test in Engineering). Those who have not passed the GATE examination may also apply, but they will be considered for the remaining seats, if any, on their passing a written test and an interview.

**5. Department of Foreign Languages, Cochin-22**

**(i) Certificate Courses : Part-time—One year**

(a) German (b) Russian

Eligibility : Bachelor's Degree

**(ii) Diploma Courses (Part-time)**

(a) German (b) Russian

Eligibility : Bachelor's degree and certificate in the language concerned. Other eligible graduates are also admitted, subject to passing an entrance test.

**6. Department of Industrial Fisheries, Foreshore Road, Cochin-16**

**M.Sc. (Industrial Fisheries)**

Eligibility : Bachelor's degree with Zoology / Botany/ Fisheries or Chemistry main with Zoology and Botany as susidiaries with 55% marks in the optional subjects.

**7. School of Marine Sciences, Foreshore Road, Cochin-16**

**(i) M. Sc. (Marine Biology)**

Eligibility : 55% marks for B.Sc. degree with Zoology main and Botany, Chemistry. Bio-Chemistry or Geology as subsidiary subjects.

**(ii) M.Sc. (Oceanography) ; and**

**(iii) M.Sc. (Meteorology)**

Eligibility: 55% marks for the B.Sc. degree with (a) Physics main and Mathematics and/or Chemistry subsidiary or (b) Mathematics main with Physics and/or Chemistry subsidiary.

**(iv) M.Sc. (Marine Geology)**

Eligibility: Bachelor's degree with Geology as main subject and with a minimum of 50% marks aggregate for optionals.

**8. Department of Mathematics and Statistics, Cochin-22**

**(i) M.Sc. (Mathematics)**

Eligibility: B.Sc. degree with Mathematics as main subject with at least 55% marks in the optional subjects taken together.

**(ii) M.Sc. (Statistics)**

Eligibility: B.Sc. degree with Mathematics or Statistics as main subject and at least 55% marks in the optional subjects taken together.

**9. Department of Polymer Science and Rubber Technology, Cochin-22**

**B. Tech. (Polymer Science and Rubber Technology)**

Eligibility: B.Sc. degree with Chemistry main and Physics and Mathematics as subsidiary or Physics main with Chemistry and Mathematics as subsidiaries or Physics, Chemistry and Mathematics as main with 55% marks in the optional subjects taken together.

**10. Department of Physics, Cochin-22**

**(i) M.Sc. (Physics)**

Eligibility: B.Sc. degree with Physics main and Mathematics as subsidiary with 55% marks in Physics.

**(ii) M.Phil. (Physics)**

Eligibility: Master's degree in Physics with 50% aggregate marks.

**11. Department of Ship Technology, Cochin-22**

**B. Tech. (Naval Architecture and Ship building)**

(will be notified separately)

**12. School of Management Studies, Cochin-22**

**Master of Business Administration (M.B.A.)**

(i) M.B.A. (Full-time)

(ii) M.B.A. (Part-time)

(iii) M. Phil. (Commerce)

(Will be notified separately)

**General Information**

1. SC/ST candidates are eligible for a concession of 5% in the minimum marks.
2. Admission to the various courses will be based on rules of reservation separately applicable of professional and post-graduate courses.
3. 25% of the seats of the M. Phil. degree courses are reserved for College/University teachers. The College/University teachers having not less than 3 years of teaching experience are eligible irrespective of grade/marks.
4. 5 seats of the M.Sc. degree course in Industrial Fisheries are reserved for the Government of Kerala of which 2 are for the officers of the Department of Fisheries and 3 are for the candidates belonging to the Fishermen Community.
5. Upto 20% of the seats of the B.Tech (Polymer Science and Rubber Technology) degree course are reserved for candidates sponsored by public/private sector industries or research and development establishments in the filed of Polymer. Only candidates with at least 3 years experience in the field after B.Sc. will be considered in this category.
6. Application forms along with details of admission procedure can be had from the concerned Head of the Department/School at the addresses indicated on payment of Rs. 60/- in

the case of items 3, 4, 6, 7 (iv) and 9 and Rs. 30/- in all other cases in cash or by Postal Order payable at Cochin-682 022 and drawn in favour of the concerned Head of the Department along with a self-addressed stamped (Rs. 1.10) envelope of the size 9" × 6".

7. The last date for the receipt of the completed application will be as fixed by the concerned departments.

Dr. C. N. Satyapalan
REGISTRAR

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## COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

**COCHIN-682 022**

**No. AC. A1/441/85 Dated : 3-8-1986**

### Announcement of Courses for 1986-87

**1. Department of Hindi, Cochin-22**

(i) M.A. (Hindi)

**Eligibility : B.A./B.Sc. with Hindi as a subject of study with 45% marks in Hindi.**

**(ii) Post-graduate Diploma Course in Translation, Administrative Drafting and Reporting in Hindi.**

Eligibility : Bachelor's degree with Hindi as one of the subjects.

**(iii) M. Phil (Hindi)**

Eligibility : M.A. degree in Hindi with a minimum of 50% aggregate marks.

**2. Department of Law, Cochin-22**
**LL.M.**

Eligibility : Bachelor's degree in Law with not less than 45% marks.

**General Information**

1. SC/ST candidates are eligible for a concession of 5% in the minimum marks.
2. Admission to the various courses will be based on rules of reservation separately applicable to professional and post-graduate courses.
3. 25% of the seats of the M.Phil degree course is reserved for College/University teachers. The College/ University teachers having not less than 3 years of teaching experience are eligible, irrespective of grade/marks.
4. Application forms along with details of admission procedure can be had from the concerned Head of the Department at the addresses indicated on payment of Rs. 30/- in cash, or by Postal Order payable at Cochin-22 and drawn in favour of the concerned Head of the Department along with a self-addressed stamped (90 ps.) envelope of the size 9" × 6".
5. The last date for the receipt of the completed application will be as fixed by the concerned departments.

Dr. C. N. Satyapalan
REGISTRAR

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# INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH

## OPEN DOCTORAL FELLOWSHIPS PROGRAMME 1986-87

### (CENTRALLY ADMINISTERED)

The Council has recently instituted 10 Open Doctoral Fellowships (centrally administered) with effect from the year 1986-87. These fellowships will be in addition to the centrally administered fellowships in specified areas which have already been announced.

Details of these fellowships are as follows :

| | | |
|---|---|---|
| 1. | Number of Fellowships | 10 (TEN) |
| 2. | Eligibility | First class/B+ and above at the Master's level in any branch of social sciences (excluding history, philosophy and literature). |
| 3. | Ph.D. Registration | Must already be registered for Ph.D. in any Indian University/Research institute funded by the ICSSR (not open for M.Phil. students) |
| 4. | Age Limit | Preferably 30 years as on **30th November, 1986.** |
| 5. | Duration | 3 years |
| 6. | Amount of Fellowship | 1. Rs. 1000 p.m. during first two years and subsequently Rs. 1200 p.m.<br>2. Contingency grant of Rs. 3000 per annum.<br>3. Full salary protection to permanent employed persons. |
| 7. | Last Date for receipt of completed application forms | **November 30, 1986** |

Incomplete and late received applications will not be entertained. Application forms may be obtained from the undersigned by enclosing a self-addressed and stamped (Rs. 1.30) envelope (23 cm × 10 cm) marking 'Application for Open Doctoral Fellowship'.

**Prem Singh**
Dy. Director
**Indian Council of Social Science Research**
**35, Ferozeshah Road, New Delhi-110001.**

# ALIGARH MUSLIM UNIVERSITY
## ALIGARH

**Advertisement No. 11/86-87**

Applications on the prescribed form are invited for the following posts :

**PROFESSORS**

**Scale of Pay** : Rs. 1500-60 1800-100-2000-125/2-2500 plus allowances.

1. **Professor of Physics (Experimental and Nuclear Physics), Department of Physics.**

2. **Professor of Zoloogy, Department of Zoology.**

3. **Professors of Geography (Two posts) Department of Geography.**

4. **Professor of Urdu (Indian Aesthetics and Urdu Literature) Department of Urdu.**

**Qualifications**

I-Essential: An eminent scholar with published work of high quality actively engaged in research. About ten years experience of teaching and/or research. Experience of guiding research at doctoral level.

*OR*

An outstanding scholar with established reputation who has made significant contribution to knowledge.

Knowledge of Indian Aesthetics (For the post of Professor of Urdu only)

*Note:* **For Post No. 1, Professor of Physics**

Specialization should be in the field of Experimental Nuclear Physics.

II, Desirable: **For Post No. 3, Professors of Geography**

**For one post**

Political Geography/Ecology and Environmental Management.

**For another post**

Agricultural Geography.

**For Post No. 4, Professor of Urdu**

(a) Knowledge of Sanskrit or Arabic or Persian Literature.

(b) Knowledge of Western Aesthetics.

(c) Knowledge of Stylistics.

**READERS**

**Scale of Pay** : Rs. 1200-50-1300-60-1900 plus allowances.

5. **Readers in Zoology, Department of Zoology.**

6. **Reader in Botany (Algology/Microbiology) Department of Botany.**

7. **Reader in Mathematics, Department of Mathematics.**

8. **Reader in Geology (Temporary but likely to become permanent) Department of Geology.**

9. **Reader in Geography, Women's College.**

10. **Reader (Economic History) (Centre of Advanced Study in History) Department of History.**

11. **Reader in Muslim Philosophy, Department of Philosophy.**

12. **Readers in Law, Department of Law.**

**Qualifications**

I-Essential: Good academic record with a doctoral degree or equivalent published work. Evidence of being actively engaged in: (i) research or (ii) innovation in teaching methods or (iii) production of teaching materials.
About five year's experience of teaching and/or research provided that atleast three of these years were as Lecturer or in an equivalent position.
This condition may be relaxed in the case of candidates with outstanding record of Teaching, Research.

Knowledge of Arabic and Persian (For the post of Reader in Muslim Philosophy only).

*Note:* **For Post No. 6, Reader in Botany**

Specialization should be in Algology/Microbiology.

**For Post No. 10, Reader (Economic History)**

The thrust-area of the Centre of Advanced Study in History is Medieval History.

II-Desirable: **For Post No. 11, Reader in Muslim Philosophy**

Specialization in or good background knowledge of Muslim Philosophy/Contemporary Western Moral and Religious Philosophy/Symbolic Logic.

**For Post No. 12, Reader in Law**

Specialization in Mercantile Law (For one post)

*Note:* **For Post No. 9, Reader in Geography**

Those who have applied earlier need not apply again. They will be considered if eligible.

**Lectures**

**Scale of Pay** : Rs. 700-40-1100-50-1600 plus allowances.

13. **Lecturers in Chemistry (One temporary but likely to become permanent and others temporary) Department of Chemistry.**

14. **Lecturer in Marathi, Department of Modern Indian Languages.**

**Qualifications:** (a) A Doctor's degree or research work of an equally high standard; and

(b) Good academic record with atleast second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing inter-discipli-

nary programmes, the degrees in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of the qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctors' degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record (weightage being given to M.Phil or equivalent degree or research work of quality) may be appointed provided he has done research work for atleast two years or has practical experience in a research Laboratory/Organisation on the condition that he will have to obtain a Doctors' degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increments until he fulfils these requirements.

*Note:* **For Post No. 13, Lecturers in Chemistry**

Those who have applied in response to the Advertisement No. 23/85-86 dated 9th January, 1986 need not apply again. They will be considered on the basis of their previous applications if eligible.

Higher initial start may be given to candidates possessing exceptional qualifications and experience. Candidates interviewed may be paid contribution towards their T.A. equal to one single second class Railway fare only.

Prescribed application forms and instructions may be had from the Assistant Registrar (Selection Committees), Registrar's Office, A.M.U., Aligarh on payment of Rs. 5/- to be deposited in the Cash Section, Finance Office, A.M.U. or through an Indian Postal Order payble to the Finance Officer, A.M.U., Aligarh either personally or by sending a self-addressed Stamped envelope of size 23 x 10 cm.

**Last date for receipt of applications is 15th October, 1986 (during office hours). Incomplete applications and those received late will not be considered.**

**Note : Suitable persons may be kept on Panel for future Appointment.**

**Syed Shahid Ali**
**REGISTRAR**

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## UNIVERSITY OF POONA

**Ganeshkhind Pune-411007**

**Advertisement No. 50/86**

**Dated : September 4, 1986**

**REQUIRES**

**Professors (3)**

| | | |
|---|---|---|
| Sanskrit | : | 1 |
| Biotechnology | : | 1 Genetic Engineering |
| | | *1 Biochemical Engineering |

**Grade:** 1500-2500.

**Age limit:** : 50 years

**Minimum Qualifications**

Eminent scholar with published work of high quality in the subject. Actively engaged in research. About ten years' teaching and/or research experience. Experience of guiding research at doctoral level.

*OR*

Outstanding scholar with established reputation having made significant contribution to knowledge.

**Readers (4)**

| | | |
|---|---|---|
| Physics | ; | 1 Temporary |
| Geography | : | *1 Climatology |
| English | : | 1 Language |
| Defence Studies | : | 1 |

**Grade:** 1200-1900.

**Age limit:** 45 years.

**Minimum Qualifications**

Good academic record with doctoral degree or equivalent published work. Actively engaged in research or innovation in teaching methods or production of teaching materials. About five years' teaching and/or research experience with minimum three years as Lecturer or equivalent position.

**Lecturers (2)**

| | | |
|---|---|---|
| Journalism | : | 1 Audio-Visual Communication |
| Philosophy | : | *1 Philosophy of Science |

**Grade:** 700-1600.

**Age limit :** 35 years.

**Minimum Qualifications for Lecturer in Journalism**

**Essential**

Good academic record with at least Second Class Master's degree in the subject (Communication/Mass Communication/ Journalism, etc.)

*OR*

Atleast Second Class (C in the seven point scale) Master's degree in Social Sciences/Sciences(Humanities with at least a Second Class Bachelor's degree or Diploma in Journalism.

**Desirable**

(i) Teaching experience at College or University level.

(ii) Work experience in any area of Mass Communication (Newspaper/ Magazine, News Agency, Public Relations Advertising, Radio or T.V. Journalism, etc.)

**Minimum Qualifications for Lecturer in Philosophy**

(a) Doctor's degree or equally high standard research work.

AND

(b) Good academic record with at least Second Class (C in the seven point scale) Master's Degree in the subject.

For developing Interdisciplinary Programmes, degrees in (a) and (b) above in relevant subjects.

Candidates who wish to be considered for more than one post must make separate application for each of the posts.

The posts marked with (*) are reserved for candidates belonging to SC/ST/NT and VJ. However, if such a candidate is not found available/suitable, for a particular post, the suitable candidate from open category may be appointed, if necessary, on purely temporary basis, for a maximum period upto the end of current academic year.

Application forms and more details of qualifications, experience, etc. for the above posts are available in person for Rs. 10/- in cash or by sending self-addressed envelope (23 cms x 20 cms) stamped for Rs. 2.10 and Postal Order of Rs. 10/- to the Registrar separately for each post. **Apply on or before 15th October, 1986.**

**S. P. Bhosale**
**REGISTRAR**

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